# 2007 Bay Area HOV Lanes



Volumes, occupancies and violation rates for freeway High Occupancy Vehicle Lanes in the San Francisco Bay Area



California Department of Transportation
District 4 Oakland
Office of Highway Operations



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#### INTRODUCTION

Transportation (Caltrans) District 4 Office of Highway Operations. This report contains information concerning High Occupancy Vehicle (HOV) lanes on the San Francisco Bay Area freeway system. Traffic performance data for mainline HOV lanes and HOV toll gates are provided for calendar year 2007. This data includes, traffic volumes, vehicle occupancies, HOV lane time savings, and HOV lane violation rates. Data for this report is collected twice annually — once in the spring and once in the fall — when normal commute traffic patterns and conditions generally occur. Volumes and occupancy data for HOV bypass lanes at metered freeway on-ramps are not included in this annual report; however, general information on these ramps is included. The intent of this HOV lane monitoring report is to compile statistics and measurements of collected data. This report should not be construed to be a conclusion on the performance of HOV lanes.

#### Major changes in 2007:

- A new section of HOV Lane on State Route 87 between State Route 85 and Interstate 280, in Santa Clara County, opened to traffic in the northbound direction on February 2, 2007 and in the southbound direction on March 16, 2007. Also, a new section of HOV Lane opened to traffic on State Route 87 between Interstate 280 and Taylor Avenue in the northbound direction on May 24, 2007 and in the southbound direction on July 26, 2007. The limits of the HOV lane now extend from State Route 85 to U.S. 101, a distance of 9.2 miles.
- A new section of HOV Lane on Interstate 880 from south of Mission Blvd. to Dixon Landing Road, in Alameda County, opened to traffic in the southbound direction on August 11, 2007. The limits of the HOV Lane now extend from south of Mission Blvd. to State Route 237, a distance of 4.0 miles.
- Two new sections of HOV lane on Interstate 80, one between Cummings Skyway and State Route 4 and the other between State Route 29 and Cummings Skyway, in Contra Costa and Solano County, opened to traffic in the westbound direction on August 31, 2007 and November 17, 2007, respectively. The limits of the HOV lane now extend from State Route 29 to the SFOBB Toll Plaza, a distance of 21.3 miles.
- About 1.0 mile of new HOV lane on northbound Interstate 680 between Marina Vista and the Benicia/Martinez Bridge Toll Plaza opened on August 26, 2007.

**HOV Report Website:** This report is available at <a href="www.dot.ca.gov/dist4/">www.dot.ca.gov/dist4/</a> under the Engineering tab.

#### **ACKNOWLEDGMENTS:**

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Department of Transportation

District 4

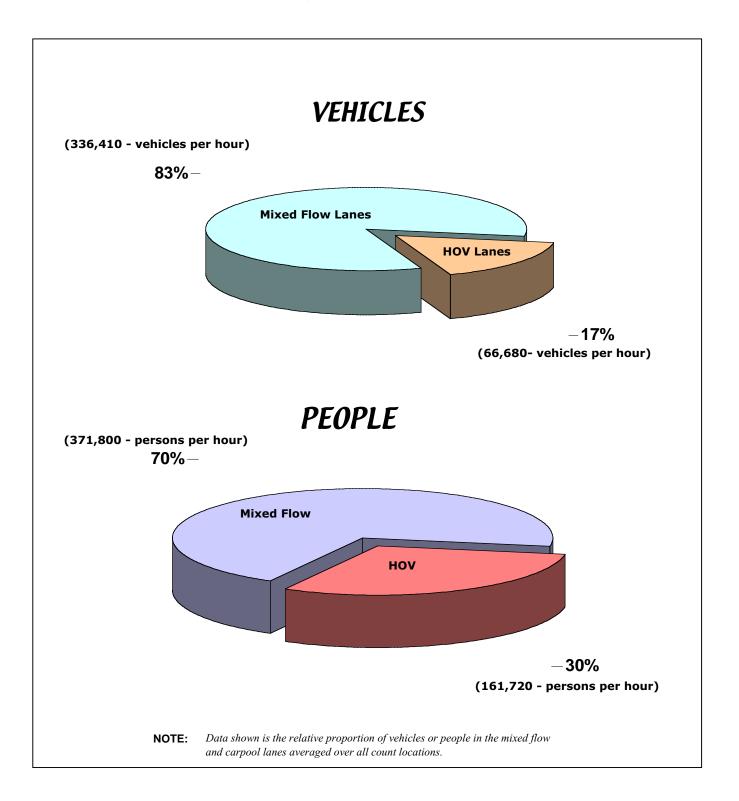
Office of Highway Operations

High-Occupancy Vehicle Lanes in the Bay Area

## **HOV FACILITIES SUMMARIES**

- Comparison of HOV Lanes vs. Mixed Flow Lanes
- Existing Mainline HOV Lanes
- Metered On-Ramps with HOV Bypasses
- Non-Metered HOV Lane On-Ramp
- Mainline HOV Lanes Under Construction
- Programmed HOV Lane Projects
- Proposed HOV Lane Projects (Not Programmed)

## COMPARISON OF HOV LANES VS. MIXED FLOW LANES (Peak-Hour)



## **EXISTING MAINLINE HOV LANES**

Route	Dir	Dir Limits		Min. occ.	Period of operation*	
ALA-80	W/B	Bay Bridge Toll Plaza	1.1	3+	5-10 AM	3-7 PM
ALA-80	W/B	Contra Costa Co Line to I-880 Viaduct	4.2	3+	5-10 AM	3-7 PM
	E/B	I 880 Viaduct to Contra Costa Co Line	5.8	3+	5-10 AM	3-7 PM
ALA-84	W/B	Newark Blvd. to Dumbarton Bridge Toll Plaza	1.8	2+	5-10 AM	3-6 PM
ALA-92	W/B	Hesperian Blvd to San Mateo Bridge Toll Plaza	2.8	2+	5-10 AM	3-6 PM
ALA-680	S/B	Route 84 to Route 237 Calaveras Blvd.	14.0	2+	5-9 AM	3-7 PM
ALA-880	S/B	Marina Blvd to Mission Blvd	20.5	2+	5-9 AM	3-7 PM
	N/B	Mission Blvd to South of Rte 238 I/C	16.7	2+	5-9 AM	3-7 PM
ALA-880	N/B	West Grand Ave to Rte 80	1.1	3+	5-10 AM	3-7 PM
ALA-880	N/B	16th Street to SFOBB Toll Plaza	1.8	3+	5-10 AM	3-7 PM
CC-04	W/B	Loveridge Road to Port Chicago Hwy	8.7	2+	6-9 AM	
	E/B	Port Chicago Hwy to Railroad Ave.	7.3	2+		3-7 PM
CC-80	W/B	Route 29 to Route 4	4.9	3+	5-10 AM	3-7 PM
		Route 4 to Alameda County Line	10.1	3+	5-10 AM	3-7 PM
	E/B	Alameda County Line to Rte 4	9.5	3+	5-10 AM	3-7 PM
CC-680	E/B	Benicia-Martinez Toll Plaza	1.0	3+	5-10 AM	3-7PM
CC-680	S/B	Marina Vista to N/O N. Main St.	7.8	2+	6-9 AM	3-7 PM
	N/B	Route 242 to Marina Vista I/C	4.4	2+	6- 9 AM	3-7 PM
CC-680	S/B	Livorna Rd to Alcosta Blvd	11.9	2+	6-9 AM	3-6 PM
	N/B	Alcosta Blvd to Livorna Rd	12.9	2+	6- 9 AM	3-6 PM
MRN-101	S/B	Andersen Dr. to Richardson Bridge	5.2	2+	6:30-8:30 A	М
	N/B	Richardson Bridge to Nellen Ave. UC	4.3	2+	4:30-7:00 P	M
	S/B	Route 37 to San Pedro Rd	6.1	2+	6:30-8:30 A	M
	N/B	San Pedro Rd to Route 37	6.1	2+	4:30-7:00 P	M
SCL-85	S/B	Rte 101 (Mountain View) to Rte 101 (So. San Jose)	23.8	2+	5-9 AM	3-7 PM
	N/B	Rte 101 (So. San Jose) to Rte 101 (Mt. View)	24.2	2+	5- 9 AM	3-7 PM
SCL-87	SB	Route 101 I/C to Route 85 I/C	9.6	2+	5 - 9 AM	3-7 PM
	NB	Route 85 I/C to Route 101 I/C	9.2	2+	5 - 9 AM	3-7 PM
SCL-101	S/B	San Mateo Co. Line to Cochrane Rd	34.2	2+	5-9 AM	3-7 PM
	N/B	Cochrane Rd to San Mateo Co. Line	34.8	2+	5- 9 AM	3-7 PM
SCL-237	W/B	Jct. Rte 880/237 to Mathilda Ave	6.1	2+	5-9 AM	3-7 PM
	E/B	Mathilda Ave to Rte 880/237 Jct.	6.5	2+	5- 9 AM	3-7 PM
SCL-280	S/B	Magdalena Ave to Meridian Ave	10.5	2+	5-9 AM	3-7 PM
	N/B	Leland Ave to Magdalena Ave	10.8	2+	5- 9 AM	3-7 PM
SCL-880	S/B	Mission Blvd to I/880/SR237 Junction	4.0	2+	5-9 AM	3-7 PM
	N/B	I 880/SR 237 Junction to Dixon Landing Road	1.3	2+	5- 9 AM	3-7 PM
SM-101	S/B	Whipple Ave to Santa Clara Co. Line	6.7	2+	5-9 AM	3-7 PM
	N/B	Santa Clara Co. Line to Whipple Ave	6.9	2+	5- 9 AM	3-7 PM
SOL-80	E/B	Carquinez Bridge Toll Plaza	0.1	3+	5-10 AM	3-7 PM
SON-101	S/B	Route 12 to Wilfred Avenue	4.0	2+	7 - 9 AM	3-6:30 PM
	N/B	Wilfred Avenue to Route 12	4.0	2+	7 - 9 AM	3-6:30 PM

TOTAL EXISTING LANE-MILES

366.7

<sup>\*</sup> NOTE: All HOV lanes currently operate Monday thru Friday.

## **METERED ON-RAMPS with HOV BYPASS LANES**

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
ALA-580	EB	Hopyard loop	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Hopyard diagonal	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Hacienda Loop	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Hacienda diagonal	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Santa Rita loop	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-580	EB	Santa Rita diagonal	2:30-7:30 pm	Yes	Jun 30, 2003	
ALA-880	NB	Dixon Landing diagonal	24 hrs	Yes	Mar 30, 2004	
ALA-880	NB	Fremont Blvd loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Auto Mall Pkwy(Durham) loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Auto Mall Pkwy(Durham)diag	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Stevenson Blvd. diagonal	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	E/B Mowry Ave loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Thornton Ave loop	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Thornton Ave diagonal	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 20, 1999	
ALA-880	NB	Industrial Parkway diagonal	24 hrs	Yes	Dec 3, 1996	
ALA-880	NB	Tennyson Rd diag	24 hrs	Yes	Dec 3, 1996	
ALA-880	NB	West A-Street diag	24 hrs	Yes	Dec 3, 1996	
ALA-880	NB	Lewelling Blvd diagonal	24 hrs	Yes	Apr 28, 1999	
ALA-880	NB	98th Ave loop	24 hrs	Yes	Apr 28, 1999	
ALA-880	NB	E/B 23rd Ave. diag	24 hrs	Yes	Apr 28, 1999	
ALA-880	SB	Dixon Landing Loop	24hrs	Yes	Mar 30, 2004	
ALA-880	SB	Fremont Blvd. diag	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Fremont Blvd. loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Auto Mall Pkwy(Durham)Diag	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Auto Mall Pkwy(Durham)loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	W/B Mowry Ave loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Thornton Ave. diagonal	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Thornton Ave. loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Alvarado-Fremont Blvd diag	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Alvarado-Niles Rd diagonal	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Alvarado-Niles Rd loop	24 hrs	Yes	Oct 19, 1999	
ALA-880	SB	Whipple Rd diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	Tennyson Rd diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	Winton Ave diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	West A-Street diag	24 hrs	Yes	Oct 29, 1996	
ALA-880	SB	E/B Davis St(Route 112) diag	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	W/B Davis St(Route 112)loop	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	98th Ave diagonal	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	Hegenberger diagonal	24 hrs	Yes	Apr 27, 1999	
ALA-880	SB	Oak St. diagonal	24 hrs	Yes	Apr 27, 1999	

#### NOTES:

- (a) Minimum occupancy requirement for all HOV bypass lanes is two persons per vehicle.
- (b) Motorcycles and inherently low-emission vehicles (ILEVs) with DMV issued decal are permitted.
- (c) Bypass lane restrictions are in effect 7 days a week unless noted otherwise.

## **METERED ON-RAMPS with HOV BYPASS LANES**

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
SCL-17	NB	Camden Ave diag	24 hrs	Yes	May 11, 2007	7 days/week
SCL-85	NB	SB Rte 101 connector	5-9am & 3-7pm	Yes	Sep 20, 2004	Monday - Friday
SCL-85	NB	SB Rte 87 connector	5-9am & 3-7pm	Yes	Jul 8, 2003	Monday - Friday
SCL-85	NB	Bernal Rd Loop	24 hrs	Yes	Sep 20, 2004	7 days/week
SCL-85	NB	Bernal Rd diag	24 hrs	Yes	Aug 26, 1994	7 days/week
SCL-85	NB	Great Oaks Blvd diag	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Cottle Rd diag	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Blossom Hill Rd loop	24 hrs	Yes	Aug 19, 1994	7 days/week
SCL-85	NB	Santa Teresa Blvd loop	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-85	NB	Almaden Expwy loop	24 hrs	Yes	Mar 19, 1999	7 days/week
SCL-85	NB	Bascom Ave diag	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-85	NB	Winchester Blvd diag	24 hrs	Yes	Nov 14, 1994	7 days/week
SCL-85	NB	Saratoga Ave diag	24 hrs	Yes	Oct 20, 1994	7 days/week
SCL-85	SB	Almaden Expwy diag	24 hrs	Yes	Oct. 19, 1994	7 days/week
SCL-85	SB	Bascom Ave diag	24 hrs	Yes	Oct. 19, 1994	7 days/week
SCL-85	SB	Camden Ave diag	24 hrs	Yes	Apr 4, 1995	7 days/week
SCL-85	SB	Stevens Creek diag	24 hrs	Yes	Oct 19, 1994	7 days/week
SCL-87	NB	Curtner Ave diag	24 hrs	Yes	Mar 16, 2007	7 days/week
SCL-87	NB	Almaden Expwy diag	24 hrs	Yes	May 11, 2007	7 days/week
SCL-87	NB	Lelong St diag	24 hrs	Yes	May 11, 2007	7 days/week
SCL-101	NB	Bernal Rd diagonal	24 hrs	Yes	Aug 1, 2005	7 days/week
SCL-101	NB	Blossom Hill diag	24 hrs	Yes	Jun 23, 1992	7 days/week
SCL-101	NB	Capitol Expwy diag	24 hrs	Yes	Jul 11, 1997	7 days/week
SCL-101	NB	SB Rte 680 connector	5:30-9am	No	Sep 2, 1982	Monday - Friday
SCL-101	NB	Guadalupe Pkwy connector	5:30-9am	Yes	Feb 12, 1980	Monday - Friday
SCL-101	NB	Trimble Rd diag	24 hrs	Yes	Nov 1, 1991	7 days/week
SCL-101	NB	San Tomas Expwy loop	5:30-9am	No	Feb 12, 1980	Monday - Friday
SCL-101	NB	Montague Expwy diag	24 hrs	Yes	Feb 12, 1980	7 days/week
SCL-101	NB	Lawrence Expwy (nb) loop	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	NB	Lawrence Expwy (sb)diag	24 hrs	Yes	Mar 8, 1999	7 days/week
SCL-101	NB	San Tomas Expwy loop	5:30-9 am	No	Feb 12, 1980	Monday - Friday
SCL-237	EB	Lawrence Expwy diag	24 hrs	Yes	Aug. 14, 1998	7 days/week
SCL-237	EB	Great America Pkwy diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-237	EB	N. First Street diag	24 hrs	Yes	Sep 24, 1996	7 days/week
SCL-237	EB	Zanker Rd diag	24 hrs	Yes	Sep 24, 1996	7 days/week

## **NON-METERED HOV LANE ON-RAMP**

Route	Dir	Ramp	Hours	HOVL metered?	HOVL Date opened	Notes
SCL-280	NB	Wolfe Rd loop	6-9 am	Yes	Jun 8, 1976	Monday - Friday
SCL-280	SB	Wolfe Rd loop	24 hrs	Yes	Apr 27, 1993	7 days/week
SCL-280	SB	Wolfe Rd diag	24 hrs	Yes	Apr 27, 1993	7 days/week
SCL-280	SB	De Anza Blvd diag	24 hrs	Yes	Apr 27, 1993	7 days/week
SCL-880	SB	SB Coleman Ave diag	24 hrs	Yes	Jul 27, 2007	7 days/week
SCL-880	SB	NB Coleman Ave loop	24 hrs	Yes	Jul 27, 2007	7 days/week
SCL-880	NB	Calaveras Blv (wb) (diag)	24 hrs	Yes	Sep 9, 2003	7 days/week
SCL-880	SB	Dixon Landing diagonal	24hrs	Yes	Mar 30, 2004	7 days/week
SM-101	NB	SB Marsh Rd diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	SB Woodside diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	EB Holly St collector	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	WB Holly St diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	EB Ralston/Marine collector	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	WB Ralston/Marine diag	24 hrs	Yes	Feb 27, 2007	7 days/week
SM-101	NB	EB Hillsdale Blvd loop	24 hrs	No	Feb 27, 2007	7 days/week
SM-101	SB	NB Marsh Rd diag	24 hrs	Yes	Jan 30, 2007	7 days/week
SM-101	SB	NB Woodside diag	24 hrs	Yes	Jan 30, 2007	7 days/week
SM-101	SB	EB Whipple Ave diag	24 hrs	Yes	Jan 30, 2007	7 days/week
SM-101	SB	Ralston-Harbor collector	24 hrs	Yes	Jan 30, 2007	7 days/week
SF-80	EB	Sterling St on-ramp to SFOBB	3:30-7:00 PM	No	Aug 30, 1982	

#### **NOTES**

<sup>(</sup>a) Minimum occupancy requirement is 3 or more persons per vehicle.

<sup>(</sup>b) 2 - seater vehicles with 2 persons, motorcycles and inherently low-emission vehicles (ILEVs) with DMV issued decal are permitted.

## MAINLINE HOV LANES UNDER CONSTRUCTION

Estimated Opening	County Route	Location	Lane Miles	Min. Occ.
2008	ALA-84	Newark Blvd. to I-880/SR 84 I/C	1.6	2+
2009	ALA-880	Dixon Landing Road to Mission Blvd (Rte 262)	8.6	2+
Feb-09	MRN-101	580/101 Separation to Coleman School POC	3.0	2+
April-09	MRN-101	Coleman School POC to N. San Pedro Rd.	3.2	2+
2009	SON-101	Rte 12 to Steele Lane	2.8	2+
April-09	SON-101	Steel Lane to Bicentennial Way	1.2	2+

TOTAL LANE-MILES UNDER CONSTRUCTION 20.4

## PROGRAMMED HOVL PROJECTS (From STIP)

County Route	EA	Location	Construct year	Cost Est. (Prog. year)	Lane Miles
ALA-880	3A920K	Hegenberger Rd. to Marina Blvd. (SB)	2013	\$86,500,000	2.9
CC-4	228500	Loveridge to Somersville	2013	\$77,400,000	4.2
MRN/SON-101	264000	Route 37 to Old Redwood Highway	2016	\$169,400,000	32.9
SCL/ALA-680	286000	Rte 237 to Rte 84 (NB)	2015	\$80,000,000	13.0
SCL-880	298300	U.S. 101 to SR 237	2013	\$73,500,000	8.6
SON-101	129650	Rohnert Park Expwy to Wilfred Ave	2010	\$65,500,000	2.6
SON-101	0A10U1	Bicentennial Way to Windsor	2010	\$103,900,000	14.2

**TOTAL** 

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## PROGRAMMED HOVL PROJECTS (Locally Funded)

County Route	EA	Location	Construct year	Cost (Prog. Year)	Lane Miles
ALA-580	290810	Hacienda to E. of Greenville Rd. (EB)	2011	\$125,700,000	11.3
ALA-580	290820	W of Hacienda to Greenville Rd. (WB)	2013	\$114,800,000	13.2
CC-80	26372K	West of Rte 4 to Carquinez Bridge (EB)		\$45,300,000	4.7
SOL-80	0A5310	Red Top Road to North Texas Street	2009	\$51,500,000	17.4
SON-101	0A1801	Old Redwood Highway to Rohnert Park Expwy	2010	\$120,400,000	12.8

**TOTAL** 

\$457,700,000	59.4

## **PROPOSED HOVL PROJECTS (Not Programmed)**

County Route	EA	Location	Post-Mile	Cost (Prog. year)	Lane Miles
CC-4	2285XK	Somersville to SR 160	26.0/31.0	\$300,000	7.2
CC-680	0A610K	NB from North Main to Route 242	15.0/18.8	\$137,000	3.8
CC-680	3A580K	SB fron North Main St to Livorna Rd	11.2/15.7	\$40,000	3.5

•		
TOTAL	\$477,000	14.5

## **DATA SUMMARIES**

- HOV Lane Peak Hour Volumes
- HOV & Non-HOV Lane Peak Hour Comparisons
- HOV Lane Peak Period Violation Rates
- HOV Lane Peak Hour Time Savings and Average Speeds

## **HOV LANE PEAK HOUR VOLUMES**

			<b>A.M.</b> Peak Hr (veh)	<b>P.M.</b> Peak Hr (veh)
ALA-80	WB	Bay Bridge Toll Plaza	3669	961
ALA-80	WB	Contra Costa County Line to Powell St	1757	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	N/A	1259
ALA-80	WB	HOV FLYOVER	1483	387
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	1408	460
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	1179	604
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd.	784	494
ALA-880	SB	Marina Blvd to Whipple Road	981	1068
		Whipple Road to Mission Blvd.	1113	849
	NB	Mission Blvd to Whipple Road	414	1059
		Whipple Road to South of Rte 238 I/C	973	1193
ALA-880	NB	16th St to SFOBB Toll Plaza	703	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy	1241	**
	EB	Port Chicago Hwy to Railroad Ave.	**	1091
CC-80	WB	Solano County to Alameda County Line	1476	N/A
	EB	Alameda County Line to Route 4	N/A	877
CC-680	N/B	Benicia-Martinez Toll Plaza	96	305
CC-680	SB	Marina Vista I/C to N/O North Main St	1155	452
	NB	Route 242 to Marina Vista I/C	193	560
CC-680	SB	Livorna Rd. to Alcosta Blvd.	1078	1011
	NB	Alcosta Blvd. to Livorna Rd.	729	1344
MRN-101	SB	Rte 37 to N. San Pedro Rd	1046	**
		Andersen Dr. to Richardson Bridge	696	**
	NB	Richardson Bridge to Nellen Ave UC	**	975
		N. San Pedro Rd to Rte 37	**	793
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	1157
		Rte 280 to Almaden Expwy	N/A	1137
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	670
	NB	Rte 101 (So. San Jose) to Almaden Expwy	620	N/A
		Almaden Expwy to Rte 280	1072	N/A
		Rte 280 to Rte 101 (Mountain View)	1036	N/A
SCL-87	SB	Route 101 I/C to Route 280 I/C	N/A	664
		Route 280 I/C to Route 85/87 Jct	N/A	449
	NB	Route 85/87 Jct to Route 280 I/C	828	N/A
		Route 280 I/C to Route 101 I/C	431	N/A

#### **HOV LANE PEAK HOUR VOLUMES**

A.M. P.M. Peak Hr (veh) Peak Hr (veh) **SCL-101** SB San Mateo Co. Line to Ellis St 780 1076 N/A 1323 Ellis St to Guadalupe Pkwy Guadalupe Pkwy to 101/280/680 I/C N/A 1473 101/280/680 I/C to Bernal Rd N/A 652 Bernal Rd to Cochrane Rd N/A 790 NB Cochrane Road to Bernal Road 900 N/A Bernal Rd to 101/280/680 I/C 665 N/A 1596 101/280/680 I/C to Guadalupe Pkwy N/A Guadalupe Pkwy to Ellis St 979 N/A Ellis St to San Mateo Co. Line 911 929 SCL-237 WB Rte 880/237Jct to Mathilda Ave 995 769 ΕB Mathilda Ave to Rte 880/237 Jct. 354 852 **SCL-280** N/A 775 SB Magdalena Ave to Leland Ave NB Leland Ave to Magdalena Ave 709 N/A **SCL-880** SB Mission Blvd. to I 880/SR237 Junction\* NB I 880/SR237 Junction to Dixon Landing Road\* SM-101 SB Whipple Ave to Santa Clara Co. Line 694 807 746 NB Santa Clara Co. Line to Whipple Ave 828 **SOL-80** WB N/A Route 29 to Contra Costa County Line N/A EΒ Carquinez Bridge Toll Plaza N/A 959 **SON-101** S/B Route 12 to Wilfred Avenue 406 678 N/B Wilfred Avenue to Route 12 374 552

N/A: Due to Resource shortfall 2007 data is not available.

<sup>\*</sup> Data collection location not available within these limits.

<sup>\*\*</sup> HOVL not in operation during this Peak Period.

## **PEAK HOUR HOV & non-HOV LANE COMPARISONS**

				% of all	vehicles		% of al	l Persons	ns	
	_			in HOVL	in Non- HOVL	in HOVL	in Non- HOVL	Number of Non-HOV Lanes	per Lane)	
ALA-80	WB	Bay Bridge Toll Plaza	AM PM	* 37% * 14%	** 63% ** 86%	* 63% * 30%	** 37% ** 70%	18 18	2% 4%	
ALA-80	WB	Contra Costa County Line to Powell Street	AM	20%	80%	37%	63%	4	16%	
	EB	I 880 Viaduct to Contra Costa Co. Line	PM AM	N/A N/A	N/A N/A	N/A N/A	N/A N/A	4 4	N/A N/A	
	LD	1 000 Viaduct to Contra Costa Co. Line	PM	15%	85%	34%	66%	4	17%	
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	AM	26%	74%	44%	56%	3	19%	
			PM	N/A	N/A	N/A	N/A	3	N/A	
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza		23%	77%	40%	60%	3	20%	
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd	PM AM	N/A 13%	N/A 87%	N/A 23%	N/A 77%	3	N/A 26%	
ALA-000	ЗБ	Roule 64 to Roule 237 Calaveras Bivu	PM	13%	87%	23%	77%	3	26%	
ALA-880	SB	Marina Blvd to Whipple Rd	AM	17%	83%	29%	71%	3	24%	
			PM	18%	82%	28%	72%	3	24%	
		Whipple Rd to Mission Blvd	AM	21%	79%	33%	67%	3	22%	
	ND	Mississ Dhalts Whiteals Dd	PM AM	17%	83%	28%	72%	3	24%	
	NB	Mission Blvd to Whipple Rd	PM	10% 17%	90% 83%	19% 30%	81% 70%	3 3	27% 23%	
		Whipple Rd to South of Rte 238 I/C	AM	15%	85%	30%	70%	3	23%	
		11	PM	19%	81%	34%	66%	3	22%	
ALA-880	NB	16th Street to SFOBB	AM	38%	62%	60%	40%	2	20%	
			PM	N/A	N/A	N/A	N/A	2	N/A	
CC-04	WB	Loveridge Road to Port Chicago Hwy	AM	19%	81%	30%	70%	3	23%	
CC-80	EB	Port Chicago to Railroad Avenue	PM AM	15%	85%	24%	76%	3	25%	
CC-80	W/B	Solano County to Alameda County Line	PM	25% N/A	75% N/A	46% N/A	54% N/A	3	18% N/A	
	EB	Alameda County Line to Route 4	AM	N/A	N/A	N/A	N/A	3	N/A	
		•	PM	13%	87%	34%	66%	3	22%	
CC-680	NB	Benicia-Martinez Toll Plaza EB	AM	4%	96%	14%	86%	11	8%	
			PM	7%	93%	20%	82%	11	7%	
CC-680	SB	Marina Vista I/C to N/O North Main St	AM PM	13% 7%	87% 93%	22% 13%	78% 87%	5 5	16% 17%	
	NB	Route 242 to Marina Vista I/C	AM	6%	94%	10%	90%	4	22%	
		reate 2 12 to mainta viola v	PM	13%	87%	22%	78%	4	19%	
CC-680	SB	Livorna Rd to Alcosta Blvd	AM	17%	83%	31%	69%	3	23%	
			PM	16%	84%	28%	72%	3	24%	
	SB	Alcosta Blvd to Livorna Rd	AM	15%	85%	30%	70%	3	23%	
MRN-101	SB	Rte 37 to N. San Pedro Rd	PM AM	21% 23%	79% 77%	36% 38%	64% 62%	3	21% 21%	
IVII / IVI	JB	Andersen Dr. to Richardson Bridge	AM	23% 13%	77% 87%	29%	71%	3	21%	
	NB	Richardson Bridge to Nellen Avenue UC	PM	15%	85%	31%	69%	3	23%	
		N. San Pedro Rd to Rte 37	PM	11%	89%	23%	77%	3	26%	
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	N/A	N/A	N/A	N/A	2	N/A	
		Dto 200 to Almodon Furnis	PM AM	26%	74%	42%	58%	2	29%	
		Rte 280 to Almaden Expwy	PM	N/A 21%	N/A 79%	N/A 34%	N/A 66%	2 2	N/A 33%	
		Almaden Expwy to Rte 101 (So. San Jose)	AM	N/A	N/A	N/A	N/A	2	N/A	
		. , , , ,	PM	15%	85%	27%	73%	2	36%	
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	17%	83%	27%	73%	2	37%	
		Alexander Francisco Dia 200	PM	N/A	N/A	N/A	N/A	2	N/A	
		Almaden Expwy to Rte 280	AM PM	23% N/A	77% N/A	37% N/A	63% N/A	2 2	32% N/A	
		Rte 280 to Rte 101 (Mtn View)	AM	18%	82%	28%	72%	2	36%	
			РМ	N/A	N/A	N/A	N/A	2	N/A	

#### **PEAK HOUR HOV & non-HOV LANE COMPARISONS**

				% of all	vehicles		% of all	l Persons	
				in HOVL	in Non- HOVL	in HOVL	in Non- HOVL	Number of Non-HOV Lanes	in Non- HOVL (Avg per Lane)
SCL-87	SB	Route 101 I/C to Route 280 I/C	AM PM	N/A	N/A	N/A	N/A	2	N/A
		Route 280 I/C to Route 85/87 Jct	AM	17% N/A	83% N/A	29% N/A	71% N/A	2	36% N/A
		Notice 200 I/O to Notice 05/07 oct	PM	10%	90%	16%	84%	2	42%
	NB	Route 85/87 Jct to Route 280 I/C	AM	20%	80%	31%	69%	2	35%
			PM	N/A	N/A	N/A	N/A	2	N/A
		Route 280 I/C to Route 101 I/C	AM	10%	90%	18%	82%	2	41%
			PM	N/A	N/A	N/A	N/A	2	N/A
SCL-101	SB	San Mateo Co. Line to Ellis St	AM	12%	88%	22%	78%	3	26%
			PM	17%	83%	27%	73%	3	24%
		Ellis St to Guadalupe Pkwy	AM PM	N/A	N/A	N/A	N/A	3	N/A
		Guadalupe Pkwy to 101/280/680 I/C	AM	21% N/A	79% N/A	34% N/A	66% N/A	3	22% N/A
		Guadalupe Pkwy to 101/260/660 I/C	PM	26%	74%	46%	54%	3	18%
		101/280/680 I/C to Bernal Rd	AM	N/A	N/A	N/A	N/A	3	N/A
		10 1/200/000 1/0 to Bornar Na	PM	13%	87%	24%	76%	3	25%
		Bernal Rd to Cochrane Rd	AM	N/A	N/A	N/A	N/A	3	N/A
			PM	15%	85%	31%	69%	3	23%
	NB	Cochrane Rd to Bernal Road	AM	20%	80%	34%	66%	3	22%
			PM	N/A	N/A	N/A	N/A	3	N/A
		Bernal Rd to 101/280/680 I/C	AM	12%	88%	22%	78%	3	26%
			PM	N/A	N/A	N/A	N/A	3	N/A
		101/280/680 I/C to Guadalupe Pkwy	AM	21%	79%	34%	66%	3	22%
			PM	N/A	N/A	N/A	N/A	3	N/A
		Guadalupe Pkwy to Ellis St	AM	15%	85%	26%	74%	3	25%
		Filia Ct to Can Matas Ca Lina	PM AM	N/A	N/A	N/A	N/A	3	N/A
		Ellis St to San Mateo Co. Line	PM	14%	86%	23%	77%	3	26%
SCL-237	WB	880/237 Jct to Mathilda Ave	AM	17% 18%	83% 82%	30% 28%	70% 72%	3 2	23% 36%
30L-231	VVD	660/237 JCt to Mathida Ave	PM	17%	83%	30%	72% 70%	2	35% 35%
	EB	Mathilda Ave to Rte 880/237 Jct	AM	8%	92%	16%	84%	2	42%
		Watinida 7100 to 1110 000/207 001	PM	17%	83%	30%	70%	2	35%
SCL-280	SB	Magdalena Ave to Leland Ave	AM	N/A	N/A	N/A	N/A	3	N/A
	-	magadiena / tre to zeidina / tre	PM	12%	88%	20%	80%	3	27%
	NB	Leland Ave to Magdalena Ave	AM	12%	88%	22%	78%	3	26%
			PM	N/A	N/A	N/A	N/A	3	N/A
SCL-880	SB	Mission Blvd to I 880/SR237 Jct***	AM						
			PM						
	NB	I 880/SR237 Jct to Dixon Landing Rd***							
			PM						
SM-101	SB	Whipple Ave to Santa Clara Co. Line	AM	11%	89%	24%	76%	3	25%
			PM	14%	86%	26%	74%	3	25%
	NB	Santa Clara Co. Line to Whipple Ave	AM	15%	85%	24%	76%	3	25%
001.55	1475	B + 00 + 0 + 0 + 0 + 0	PM	16%	84%	32%	68%	3	23%
SOL-80	WB	Route 29 to Contra Costa County Line	AM	N/A	N/A	N/A	N/A	3	N/A
	ED	Carquinaz Pridgo	PM	N/A	N/A	N/A	N/A	3	N/A
	EB	Carquinez Bridge	AM PM	N/A	N/A	N/A	N/A 50%	11	N/A
SON 404	CD.	Pouto 12 to wilfred Avenue	AM	20%	80%	41%	59%	11	5%
SON-101	SB	Route 12 to wilfred Avenue	PM	10% 15%	90% 85%	17% 26%	83% 74%	2	42% 37%
	NB	Wilfred Avenue to Route 12	AM	10%	90%	17%	83%	2 2	42%
	IND	WILLIAM TARELING TO LOUGE 17	,v.	10/0	30 /0	17.70	00/0	_	<b>→∠</b> /0

<sup>\*</sup> Total in all 4 HOVL's combined.

 $\ensuremath{\text{N/A}}$  : Due to Resource shortfall 2007 data is not available.

<sup>\*\*</sup> Total in all 18 Non HOVL's combined.

<sup>\*\*\*</sup> Data collection location not avaliable within these limits.

## **HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY**

			A.M.	P.M.
ALA-80	WB	Bay Bridge Toll Plaza	6.5%	7.8%
ALA-80	WB	Contra Costa County Line to Powell St	11.1%	N/A
	EB	I 880 Viaduct to Contra Costa Co. Line	N/A	7.9%
ALA-80	WB	HOV FLYOVER RAMP	11.3%	10.9%
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	0.8%	0.4%
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	1.6%	0.7%
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd	3.3%	3.5%
ALA-880	SB	Marina Blvd to Whipple Road	3.9%	1.8%
		Whipple Road to Mission Blvd.	3.5%	2.1%
	NB	Mission Blvd to Whipple Road	0.9%	2.3%
		Whipple Road to South of Rte 238 I/C	0.3%	1.5%
ALA-880	NB	16th St to SFOBB Toll Plaza	12.6%	N/A
CC-04	WB	Loveridge Road to Port Chicago Hwy.	7.9%	**
	EB	Port Chicago Hwy to Railroad Ave	**	2.5%
CC-80	WB	Solano County to Alameda County Line	10.6%	N/A
	EB	Alameda County Line to Rte 4	N/A	2.0%
CC-680	NB	Benicia-Martinez Toll Plaza	3.5%	7.8%
CC-680	SB	Marina Vista to N/O North Main St.	1.5%	1.5%
	NB	Route 242 to Marina Vista I/C	5.8%	7.3%
CC-680	SB	Livorna Rd. to Alcosta Blvd.	2.2%	3.4%
	NB	Alcosta Blvd. to Livorna Rd.	3.9%	2.2%
MRN-101	SB	Rte 37 to N. San Pedro Rd	1.1%	**
		Andersen Dr. to Richardson Bridge	1.5%	**
	NB	Richardson Bridge to Nellen Ave UC	**	1.2%
		N. San Pedro Rd to Rte 37	**	1.1%
SCL-85	SB	Rte 101 (Mountain View) to Rte 280	N/A	1.0%
		Rte 280 to Almaden Expwy	N/A	0.4%
		Almaden Expwy to Rte 101 (So. San Jose)	N/A	0.9%
	NB	Rte 101 (So. San Jose) to Almaden Expwy	0.3%	N/A
		Almaden Expwy to Rte 280	4.6%	N/A
		Rte 280 to Rte 101 (Mountain View)	0.0%	N/A
SCL-87	SB	Route 101 I/C to Route 280	N/A	0.5%
		Route 280 to Route 85/87 Jct	N/A	0.9%
	NB	Route 85/87 Jct to Route 280	1.1%	N/A
		Route 280 to Route 101 I/C	3.9%	N/A
SCL-101	SB	San Mateo Co. Line to Ellis St	2.9%	0.3%
		Ellis St to Guadalupe Pkwy	N/A	0.0%
		Guadalupe Pkwy to 101/280/680 I/C	N/A	0.1%
		101/280/680 I/C to Bernal Rd	N/A	0.5%
		Bernal Rd to Cochrane Road	N/A	0.4%

#### **HOV LANE PEAK PERIOD VIOLATION RATE SUMMARY**

		A.M.	P.M.
NB	Cochrane Rd to Bernal Rd	0.6%	N/A
	Bernal Rd to 101/280/680 I/C	0.8%	N/A
	101/280/680 I/C to Guadalupe Pkwy	0.1%	N/A
	Guadalupe Pkwy to Ellis St	1.5%	N/A
	Ellis St to San Mateo Co. Line	0.0%	0.5%
WB	880/237 Jct to Mathilda Ave	0.2%	2.0%
EB	Mathilda Ave to Rte 880/237 Jct.	0.0%	0.0%
SB	Magdalena Ave to Leland Ave	N/A	0.0%
NB	Leland Ave to Magdalena Ave	0.1%	N/A
SB	Mission Blvd to I 880/SR237 Jct*		
NB	I 880/SR237 Jct to Dixon Landing Road*		
SB	Whipple Ave to Santa Clara Co. Line	1.3%	1.2%
NB	Santa Clara Co. Line to Whipple Ave	1.5%	6.0%
WB	Route 29 to Contra Costa County Line	N/A	N/A
EB	Carquinez Bridge Toll Plaza	N/A	10.1%
SB	Route 12 to Wilfred Avenue	4.4%	2.7%
NB	Wilfred Avenue to Route 12	3.5%	1.4%
	WB EB SB NB SB NB SB NB SB SB SB SB SB SB	Bernal Rd to 101/280/680 I/C  101/280/680 I/C to Guadalupe Pkwy Guadalupe Pkwy to Ellis St Ellis St to San Mateo Co. Line  WB 880/237 Jct to Mathilda Ave EB Mathilda Ave to Rte 880/237 Jct.  SB Magdalena Ave to Leland Ave  NB Leland Ave to Magdalena Ave  SB Mission Blvd to I 880/SR237 Jct*  NB I 880/SR237 Jct to Dixon Landing Road*  SB Whipple Ave to Santa Clara Co. Line  NB Santa Clara Co. Line to Whipple Ave  WB Route 29 to Contra Costa County Line  EB Carquinez Bridge Toll Plaza  SB Route 12 to Wilfred Avenue	NB Cochrane Rd to Bernal Rd 0.6%  Bernal Rd to 101/280/680 I/C 0.8%  101/280/680 I/C to Guadalupe Pkwy 0.1%  Guadalupe Pkwy to Ellis St 1.5%  Ellis St to San Mateo Co. Line 0.0%  WB 880/237 Jct to Mathilda Ave 0.2%  EB Mathilda Ave to Rte 880/237 Jct. 0.0%  SB Magdalena Ave to Leland Ave N/A  NB Leland Ave to Magdalena Ave 0.1%  SB Mission Blvd to I 880/SR237 Jct*  NB I 880/SR237 Jct to Dixon Landing Road*  SB Whipple Ave to Santa Clara Co. Line 1.3%  NB Santa Clara Co. Line to Whipple Ave 1.5%  WB Route 29 to Contra Costa County Line N/A  EB Carquinez Bridge Toll Plaza N/A  SB Route 12 to Wilfred Avenue 4.4%

N/A: Due to Resource shortfall 2007 data is not available.

<sup>\*</sup> Data collection location not available within these limits.

<sup>\*\*</sup> HOV not in operation during this Peak Period

#### HOV LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time (minutes) Non-HOVL	Travel Time (minutes) HOVL	HOVL Time Saving (minutes)	Avg. Speed (mph) Non-HOVL	Avg. Speed (mph) HOVL
ALA-80	WB	Bay Bridge Toll Plaza	AM	25	5	20	3	13
		Day Dilago For Flaza	PM	10	2	8	7	33
ALA-80	WB	Contra Costa County Line to Powell St	AM	13	9	4	19	28
		•	PM	13	5	8	19	50
	EB	I 880 Viaduct to Contra Costa Co. Line	AM	5	5	0	65	65
			PM	21	12	9	17	29
ALA-80	WB	HOV FLYOVER RAMP	AM	9	7	2	6	8
			PM	1	1	0	55	55
ALA-84	WB	Newark Blvd to Dumbarton Bridge Toll Plaza	AM	4	2	2	27	54
			PM	3	2	1	36	54
ALA-92	WB	Hesperian Blvd to San Mateo Bridge Toll Plaza	AM	4	3	1	42	55
			PM	4	3	1	42	55
ALA-680	SB	Route 84 to Route 237 Calaveras Blvd.	AM	22	13	9	38	65
			PM	14	13	1	61	65
ALA-880	SB	Marina Blvd. to Whipple Road	AM	32	8	24	17	65 65
			PM	14	8	6	39	65
		Whipple Road to Mission Blvd	AM	28	11	17	25	63
			PM	14	11	3	49	63
	NB	Mission Blvd. to Whipple Road	AM	14	11	3	49	62
			PM	20	11	9	34	62
		Whipple Road to South of Rte 238 I/C	AM	28	5	23	11	64
			PM	15	5	10	21	64
ALA-880	NB	16th St to SFOBB Toll Plaza	AM	20	2	18 4	5	50 50
			PM	3		1 12	36	50
CC-04	WB	Loveridge Rd. to Port Chicago Hwy	AM PM	20	7	14	26 21	65 63
	EB	Port Chicago Hwy to West of Railroad Ave.		21				
CC-80	WB	Solano County to Alameda County Line*	AM PM	23 9	15 9	8 0	26 65	40 65
		N. J. O. J. H. J. Dr. J.	AM	9	9	0	65	
	EB	Alameda County Line to Rte 4	PM	9 25	11	14	23	65 52
	NID	N/OM : N/: L/O : B : : B : L T   B		1	1	0	65	65
CC-680	NB	N/O Marina Vista I/C to Benicia Bridge Toll Plaz	PM	8	7	1	59	65
00.000	CD	Marina Winte I/O to NI/O Namba Marina Ct	AM	17	7	10	28	65
CC-680	SB	Marina Vista I/C to N/O North Main St	PM	8	7	1	61	65
	ND	Doute 242 to Marine Viete	AM	5	4	1	53	65
	NB	Route 242 to Marina Vista	PM	6	4	2	44	65
CC-680	SB	Livorna Rd to Alcosta Blvd	AM	18	11	7	40	65
CC-000	SD	LIVOITIA RU IO AICOSIA BIVU	PM	20	11	9	36	65
	NB	Alcosta Blvd to Livorna Rd	AM	14	12	2	55	65
	IND	Alcosta biva to Livoliia Na	РМ	20	12	8	39	65
MRN-101	SB	Rte 37 to N. San Pedro Rd	AM	41	33	8	9	11
	OD	Andersen Drive to Richardson Bridge	AM	7	6	1	45	55
	NB	Richardson Bridge to Nellen Ave. UC	PM	19	12	7	14	22
	110	N. San Pedro Rd to Rte 37	РМ	6	6	0	65	65
SCL-85	SB	Rte 101 (Mtn View) to Rte 280	AM	5	5	0	65	65
30-00	22		РМ	16	5	11	22	65
		Rte 280 to Almaden Expwy	AM	11	11	0	65	65
			PM	30	11	19	24	65
		Almaden Expwy to Rte 101 (So. San Jose)	AM	6	6	0	65	65
			PM	7	6	1	55	65
	NB	Rte 101 (So. San Jose) to Almaden Expwy	AM	14	6	8	28	65
		(	PM	7	6	1	58	65
		Almaden Expwy to Rte 280	AM	23	14	9	33	53
		. , ,	PM	12	12	0	65	65
		Rte 280 to Rte 101 (Mtn View)	AM	12	5	7	27	65
		, ,	PM	6	5	1	54	65

 $<sup>^{\</sup>ast}$  Data was only collected from Rte 4 to Alameda County Line within this section.

## HOV LANE PEAK HOUR TIME SAVINGS AND AVERAGE SPEEDS

				Travel Time (minutes) Non-HOVL	Travel Time (minutes) HOVL	HOVL Time Saving (minutes)	Avg. Speed (mph) Non-HOVL	Avg. Speed (mph) HOVL
SCL-87	SB	Route 101 I/C to Route 280 I/C	AM	5	5	0	55	55
002 0.	OB	Note for we to note 250 we	PM	12	5	7	24	55
		Route 280 I/C to Route 85/87 Jct	AM	4	4	0	65	65
			PM	15	4	11	19	65
	NB	Route 85/87 Jct to Route 280 I/C	AM	11	6	5	35	65
		reads so, or set to reads 200 inc	PM	6	6	0	65	65
		Route 280 I/C to Route 101 I/C	AM	13	3	10	16	65
			PM	3	3	0	65	65
SCL-101	SB	San Mateo Co. Line to Ellis St	AM	8	5	3	38	65
			PM	11	5	6	28	65
		Ellis St to Guadalupe Pkwy	AM	7	6	1	61	65
		,	PM	22	6	16	19	65
		Guadalupe Pkwy to 101/280/680 I/C	AM	7	5	2	50	65
		,	PM	19	8	11	18	44
		101/280/680 I/C to Bernal Rd	AM	7	7	0	65	65
			PM	10	7	3	46	65
		Bernal Rd to Cochrane Road	AM	8	8	0	65	65
			PM	9	8	1	60	65
	NB	Cochrane Road to Bernal Road	AM	9	9	0	65	65
			PM	9	9	0	65	65
		Bernal Rd to 101/280/680 I/C	AM	16	8	8	31	65
		20/1/a/ 1/4 to 10 1/200/000 1/0	PM	8	8	0	63	65
		101/280/680 I/C to Guadalupe Pkwy	AM	17	6	11	18	50
		10 1/200/000 1/0 to Oddadaapp 1 kwy	PM	5	5	0	65	65
		Guadalupe Pkwy to Ellis Street	AM	10	7	3	44	65
		Suddinge I kwy to Ellis Street	PM	12	7	5	36	65
		Ellis to San Mateo Co. Line	AM	14	5	9	22	65
		Lind to Gari Wated Go. Line	PM	12	5	7	25	65
SCL-237	WB	McCarthy Blvd to Mathilda Ave	AM	13	6	7	29	65
OOL 201	***	Modality Biva to Matimaa 700	PM	9	6	3	41	65
	EB	Mathilda Ave to Rte 880/237 Jct.	AM	9	6	3	43	65
	LD	Wattilida Ave to Nie 000/237 3ct.	PM	18	6	12	22	65
SCL-280	SB	Magdalena Ave to Leland Ave	AM	11	10	1	60	65
30L-200	OD	Magualeria Ave to Leiand Ave	PM	15	10	5	42	65
	NB	Leland Ave to Magdalena Ave	AM	26	10	16	25	65
	ND	Leiand Ave to Magualena Ave	PM	11	10	1	59	65
SCL-880	NB	Route 237 to Dixon Landing Road	AM	1	1	0	65	65
30L-000	IND	Notice 237 to bixon Earlaing Noad	PM	3	1	2	24	65
	SB	Mission Blvd to Route 237	AM	4	4	0	65	65
	SD	IVIISSION DIVU to Noute 237	PM	4	4	0	65	65
SM-101	SB	Whitehale Ave to Cente Clare Co. Line	AM	16	6	10	26	65
SIVI-101	SD	Whipple Ave to Santa Clara Co. Line	PM	16	6	10	26	65
	NB	Santa Clara Co. Line to Whipple Ave	AM	7	6	1	57	65
	IND	Santa Clara Co. Line to whippie Ave	PM	11	6	5	36	65
SOL 90	WD	Pouto 20 to Contro Costo County Line**	AM		- U		00	
SOL-80	WB	Route 29 to Contra Costa County Line**	PM					
		Carquinaz Bridgo Tall Dlaza	AM	1	1	0	65	65
	EB	Carquinez Bridge Toll Plaza	PM	1	1	0	65	
SON 404	CD	Dto 40 to Wilfred Aver-	AM	4	4	0	60	65 65
SON-101	SB	Rte 12 to Wilfred Avenue	PM	4	4	0	60	65
		William I A and a Discussion	AM	6	4	2	40	65
	NB	Wilfred Ave to Rte 12	PM	7	4	3	34	65
			L IVI	,	4	J.	.74	(1:1)

<sup>\*\*</sup>Data was not collected within this section.

## GENERAL FACILITY INFORMATION

- Mainline HOV Lanes
- Toll Bridge HOV Bypass Lanes

#### MAINLINE HOV LANES

#### ALA-80: San Francisco-Oakland Bay Bridge Toll Plaza

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decal.

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Lane 1: Route 880 left side HOV ramp to metering signals

Length = 0.4 mile

Lane 2: Route 580 connector to metering signals

Length = 1.1 miles

Lane 21: Route 880 right side HOV ramp to metering signals

Length = 0.6 mile

Lane 22: HOV slip ramp to metering signals

Length = 0.8 miles

DATES: Apr 17, 1970 Opened; Buses only

Dec 8, 1971 Carpools permitted; min. occ. three persons per vehicle Feb 2, 1979 Buses only in lane 17; 6:30-8:30, Mon-Fri-only lane on

W. Grand Ave, approached from Maritime on-ramp to toll plaza;

temporary measure in response to BART tube closure

Apr 17, 1979 Bus-only in lane 17 & W. Grand Ave approach made permanent;

W. Grand Ave slip ramp designated for buses only; hours of operation changed to 6:00-9:00 AM, Mon-Fri; lane 8 reverted to mixed flow; carpools permitted to use lane 10 during AM peak

Oct 12, 1981 Opened; lanes 18 & 19; buses only, 24 hours/day, 7 days/week;

carpools permitted, 6:00-9:00 AM, Mon-Fri; lane 17 reverted to

mixed flow

Jul 18, 1983 Lanes 8 & 9 reverted to mixed flow; lane 1 converted to HOV;

lanes 18/19 merge moved from downstream of toll plaza to

downstream of metering signals

Apr 22, 1986 Mini toll plaza (lane 18, 19, 20) opened; right side HOV lanes

designated as lanes 21 & 22

Sep 7, 1988 Hours of Operation were extended from 6-9 AM to 5-10 AM

on September 7, 1988.

Sep 7, 1988 The HOVL violation fine increased in early 1989.

Nov 3, 1989 Lane 2 converted to HOV; left HOVL extended upstream to 32nd

St on-ramp; AM HOV hours changed to 5:00- 10:00 AM, Mon-Fri

Mar 1, 1992 Motorcycles permitted

Oct 1, 1995 Two-seat vehicles with two occupants permitted

Apr 8, 1997 HOV slip ramp approaching right side of toll plaza opened;

buses only, 24 hours/day, 7 days/week; carpools/motorcycles

OK, 5:00-10:00 AM, 3:00-6:00 PM, Mon-Fri

Jul 23, 1997 Route 880 right side HOV ramp opened; buses only, 24 hours/day,

7 days/week; carpools/motorcycles OK, 5:00-10:00 AM;

3:00-6:00 PM, Mon-Fri

Feb. 2, 1998 PM Hours of operation changed to 3:00-7:00 PM

May 16, 1998 Route 880 left side HOV ramp opened; buses/carpools/

motorcycles only, 5:00-10:00 AM, 3:00-7:00 PM, Mon-Fri

Jul 1, 2000 Inherently low-emission vehicles with DMV issued decals permitted.

#### **ALA-80: HOV FLYOVER**

OCCUPANCY Three or more persons per vehicle, motorcycles, 2 seaters vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decal.

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Powell St (MP 3.8) to HOV Slip Ramp(MP. 4.8)

Length = 1.0 miles

Feb 2, 1998 Opened; HOV flyover. Hours of operation 5:00 AM-7:00 PM,

Monday thru Friday

Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

#### ALA-80: Contra Costa County Line to I-880 Viaduct

OCCUPANCY Three or more persons per vehicle, motorcycles, 2 seaters vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decal.

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Contra Costa County Line (MP 8.0) to Powell St (MP 3.8)

Length = 4.2 miles

DATES: Feb. 2, 1998 Opened; Contra Costa County Line to Powell St;

HOV flyover opened; hours of operation 5:00 AM-7:00 PM,

Monday thru Friday

Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

EASTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: I-880 Viaduct(MP 2.2) to Contra Costa County Line (MP 8.0)

Length = 5.8 miles

DATES: Jul 31, 1998 Opened; Gilman St to Contra Costa County Line

Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

Nov 20, 1998 Extended; Powell St to Gilman St.
Nov 12, 2003 Extended; I 880 Viaduct to Powell St.

#### ALA-84: Newark Blvd to Dumbarton Bridge Toll Plaza

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: Newark Blvd U/C (MP 4.9) to west of Toll Plaza (MP 3.1)

Length = 1.8 miles

DATES: Oct 6, 1982 Opened with new bridge; 1000-ft long bypass lane at booths

Nov 22, 1989 Extended due to Loma Prieta quake; Newark Blvd to

University Ave

Nov 17, 1990 Shortened; Newark Blvd to west of Toll Plaza

Jan 1, 1992 Minimum occupancy reduced from three to two persons per vehicle

#### ALA-92: Hesperian Blvd to San Mateo Bridge Toll Plaza

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: Hesperian on-ramp (MP 5.6) to Toll Plaza (MP 2.8)

Length = 2.8 miles

DATES: Oct 23, 1989 Opened; Clawiter Rd on-ramp to east of Toll Plaza

Jan 1, 1992 Minimum occupancy reduced from three to two persons per vehicle

Jan 15, 1992 Extended; Clawiter Rd on-ramp to west of Toll Plaza

Jul 2, 2001 Extended and relocated; Hesperian Blvd. To West of Toll Plaza

Jun 3, 2003 Speed changed from 55mph to 65 mph

July 8, 2007 Lane #1 and #2 opened for HOVs during both AM and PM peak periods.

#### ALA/SCL-680: Route 84 to Route 237 Calaveras Blvd.

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Route 84 on-ramp (MP R11.5) to Route 237 Calaveras Blvd. On-ramp (MP M7.6)

Length = 14.0 miles

DATES: Nov 26, 2002 Opened; Washington Blvd. On-ramp to Route 237 Calaveras Blvd. On-ramp

Dec 5, 2002 Extended; Route 84 on-ramp to Route 237 Calaveras Blvd. On-ramp

#### ALA 880: Marina Blvd to Mission Blvd (Rte 262)

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Marina Blvd. (MP 22.7) to Mission Blvd. (Rte 262) (MP 2.4)

Length = 20.5 miles

DATES: Sep 22, 1991 Opened; A-Street to north of Tennyson

Nov 6, 1991 Extended; Tennyson to Industrial Pkwy

Jun 26, 1992 Extended; Rte 238 to A-Street

Nov 18, 1993 Extended; Industrial Pkwy to Whipple Rd

Dec 1994 Hours of operation changed from 5-10 AM and 3-6 PM to

5-9 AM, 3-7 PM respectively

Mar 17, 1995 Extended; Marina Blvd to Rte 238

Jun 15, 1998 Extended; Whipple Rd. to Alvarado/ Fremont Blvd.
Oct 23, 1998 Extended; Alvarado/Fremont Blvd. to Mowry Ave.
Dec 11, 1998 Extended; Mowry Ave. to Mission Blvd. (Rte 262)

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Mission Blvd. (MP 2.4) to one mile south of Rte 238 (MP 19.3)

Length = 16.7 miles

DATES: Sep 19, 1991 Opened; north of Tennyson to A-Street

Nov 8, 1991 Extended; Industrial Pkwy to Tennyson

Jun 26, 1992 Extended; A-Street to Rte 238

Dec 3, 1993 Extended; Whipple Rd to Industrial Pkwy

Dec 1994 Hours of operation changed from 5-10 AM and 3-6 PM to

5-9 AM, 3-7 PM respectively

Sep 23, 1996 Shortened; Whipple Rd to one mile south of Rte 238

Jun 15, 1998 Extended; Alvarado/Fremont Blvd. to Whipple Rd.

Oct 30, 1998 Extended; Mowry Ave. to Alvarado/Fremont Blvd.

Nov 30, 1998 Extended; Mission Blvd. (Rte 262) to Mowry Ave.

#### ALA-880: 16th Street to SFOBB Toll Plaza

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decal.

NORTHBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: 16th Street to NB Rte 880/WB Rte 80 Jct

Length = 1.4 miles

DATES: May 16, 1998 Opened; 16th Street to left HOV ramp at SFOBB Toll Plaza

#### ALA-880: West Grand Ave. to EB Rte 80 HOV Lane Merge

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decal.

NORTHBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: West Grand Ave.(MP R34.7) to EB Rte 80 HOV Lane Merge (MP R35.8)

Length = 1.1 miles

DATES: Nov 12, 2003 Opened; West Grand Ave to EB Rte 80 HOV Lane Merge

#### CC-4: Loveridge Rd. to Port Chicago Highway

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

WESTBOUND HOURS: 6:00 - 9:00 AM, Monday thru Friday

LIMITS: Loveridge Rd. (MP 24.4) to Port Chicago Highway (MPR 15.7)

Length = 8.7 miles

DATES: May 1, 2000 Opened; Bay Point to Port Chicago Highway; 6-9 AM, Mon-Fri

May 5, 2000 Extended: Bailey Road to Port Chicago Highway

Jul 23, 2001 Extended: West of Railroad Ave. to Port Chicago Highway

Jul 24, 2006 Extended: Loveridge Rd. to Port Chicago Highway

EASTBOUND HOURS: 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Port Chicago Highway (MPR 16.2) to Railroad Ave. (MPR23.5)

Length = 7.3 miles

DATES: Aug 6, 2001 Opened; Port Chicago Highway to West of Railroad Ave.

Jul 24, 2006 Extended: Port Chicago Highway to Railroad Ave.

#### CC-80 Solano County Line to Alameda County Line

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decal.

WESTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Solano County Line (MP 14.1) to Alameda County Line (MP 0.0)

Length = 14.1 miles

DATES: Mar 5, 1997 Opened; Pinole Valley Rd to Cutting Blvd; 5-10 AM, Mon-Fri

Apr 18, 1997 2-seat vehicles with 2 persons permitted to use HOVL

May 3, 1997 Extended: Cutting Blvd to Central Ave Sep 20, 1997 Extended; Route 4 to Pinole Valley Rd

Feb 2, 1998 Extended; Central Ave to Alameda County Line;

Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri

Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

Aug 31,2007 Extended; Cummings Skyway to Route 4

Nov 17, 2007 Extended; Solano County Line to Cummings Skyway

EASTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Alameda County Line (MP 0.0) to West of Route 4 off-ramp (MP 9.5)

Length = 9.5 miles

DATES: Feb 12, 1997 Opened; San Pablo Dam Rd to Pinole Valley Rd; 3-7 PM, Mon-Fri

Feb 13, 1997 Extended; Cutting Blvd to San Pablo Dam Rd

Apr 18, 1997 2-seat vehicles with 2 persons permitted to use HOVL

May 3, 1997 Extended; Central Ave to Cutting Blvd Aug 30, 1997 Extended; Pinole Valley Rd to Route 4

Feb 2, 1998 Hours of operation changed to 5:00 AM-7:00 PM, Mon-Fri Aug 3, 1998 Hours of operation changed to 5-10 AM, 3-7 PM, Mon-Fri

Extended; Central Ave to Alameda County Line

#### CC-680: Martinez-Benicia Bridge Toll Plaza to N/O Marina Vista

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decals.

NORTHBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Benicia Toll Plaza (24.5) to North of Marina Vista(24.1)

Length = 1.0 miles

DATES: Aug 26, 2007 Opened; Opened with new bridge; 1.0 mile long bypass lane #1

from N/O Marina Vista to Toll Plaza

#### CC-680: Marina Vista to N/O North Main St.

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 6:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: South of Marina Vista(MP 24.1) to 0.7 miles N/O North Main St. off-ramp (MP R16.3)

Length = 7.8 miles

DATES: Sep 11, 2004 Opened; S/O Route 4 to N/O North Main St.

Jun 14, 2005 Extended S/O Marina Vista to North Main St.

NORTHBOUND HOURS: 6:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Route 242 I/C (R018.707) to South of Marina Vista(24.1)

Length = 4.4 miles

DATES: Apr 28, 2005 Opened; Route 242 to South of Marina Vista.

#### CC-680: Livorna Rd to Alcosta Blvd.

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 6:00 - 9:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: 0.5 miles north of Livorna Rd off-ramp (MP R11.9) to north of

Alcosta Blvd on-ramp (MP R21.6)

Length = 11.9 miles

DATES: Oct 3, 1994 Opened; Stone Valley Rd on-ramp to Alcosta Blvd on-ramp

Feb 6, 1995 Extended; Livorna Rd on-ramp to Alcosta Blvd

May 5, 1999 Shortened; Livorna Rd on-ramp to north of Alcosta Blvd off-ramp

NORTHBOUND HOURS: 6:00 - 9:00 AM, 3:00 - 6:00 PM, Monday thru Friday

LIMITS: 0.4 miles south of Alcosta on-ramp (MP R21.6) to Livorna

on-ramp (MP R11.9) Length = 12.9 miles

DATES: Oct 3, 1994 Opened; Alcosta Blvd on-ramp to Stone Valley Rd on-ramp

Feb 6, 1995 Extended; Alcosta Blvd to Livorna Rd on-ramp

#### MRN-101: Richardson Bridge to Andersen Dr.

OCCUPANCY Two or more persons per vehicle, motorcycles permitted, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 6:30 - 8:30 AM, Monday thru Friday

LIMITS: Andersen Dr. (MP 9.9) to Richardson Bridge (MP 4.7)

Length = 5.2 miles

DATES: Dec 23, 1974 Opened; buses only

Jun 16, 1976 Carpools permitted; min. occ. three persons per vehicle

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Jul 13, 1998 HOV hours extended to 5:00-9:00 AM

Dec 14, 1998 Extended hours cancelled

Jul 17, 2006 Extended: Andersen Dr. to North of Greenbrae ped OC

NORTHBOUND HOURS: 4:30 - 7:00 PM, Monday thru Friday

LIMITS: South of Richardson Bridge (MP 3.8) to Nellen Ave. UC (MP 8.1)

Length = 4.3 miles

DATES: Dec 20, 1974 Opened; buses only

Jun 15, 1976 Carpools permitted; min. occ. three persons per vehicle

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Jul 13, 1998 HOV hours extended to 3:00-7:00 PM

Dec 14, 1998 Extended hours cancelled

Jul 20, 2006 Extended: North of Corte Madera to Nellen Ave. UC

#### MRN-101: North San Pedro Rd to Rte 37

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 6:30 - 8:30 AM, Monday thru Friday

LIMITS: Route 37/S. Novato Blvd (MP 18.9) to north of San Pedro U/C (MP 12.8)

Length = 6.1 miles

DATES: Jul 24, 1987 Opened; Marinwood to North San Pedro Rd

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Feb 8, 1991 Extended; Marinwood to Rte 37

Jul 13, 1998 HOV hours extended to 5:00-9:00 AM

Dec 14, 1998 Extended hours cancelled

NORTHBOUND HOURS: 4:30 - 7:00 PM, Monday thru Friday

LIMITS: North of San Pedro U/C (MP 12.8) to Route 37/S. Novato Blvd (MP 18.9)

Length = 6.1 miles

DATES: Aug 12, 1986 Opened; North San Pedro to Marinwood

Oct 1, 1988 Minimum occupancy reduced from three to two persons per vehicle

Sep 23, 1990 Motorcycles permitted

Feb 21, 1991 Extended; Marinwood to Rte 37
Jul 13, 1998 HOV hours extended to 3:00-7:00 PM

Dec 14, 1998 Extended hours cancelled

#### SCL-85: Rte 101 (Mountain View) to Rte 101 (San Jose)

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Rte 85/101 connector ramp in So. San Jose (MP 23.8) to Rte 101 in

Mountain View (MP 0.0) Length = 23.8 miles

DATES: Apr 25, 1990 Opened; Rte 237 to Rte 280

Aug 12, 1994 New section; Almaden Expwy to Bernal Rd
Oct 19, 1994 Extended; Rte 280 to Almaden Expwy

Nov 13, 1998 Extended; Rte 101 (Mountain View) to Rte 237

Oct 22, 2004 Opened direct HOV Connector from Rte 85 to Rte 101(San Jose)

May 26, 2006 Opened direct HOV Connector from Rte 101 to Rte 85(Mountain View)

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Rte 85/101 connector ramp in So. San Jose (MP 0.0) to

Rte 101 in Mountain View (MP 24.2)

Length = 24.2 miles

DATES: Feb 22, 1990 Opened; Rte 280 to Rte 237

Aug 12, 1994 New section; Rte 101 (San Jose) to Almaden Expwy

Oct 19, 1994 Extended; Almaden Expwy to Rte 280

Nov 6, 1998 Extended; Rte 237 to Rte 101 (Mountain View)

Sep 20, 2004 Opened direct HOV Connector from Rte 101 to Rte 85(San Jose)

May 26, 2006 Opened direct HOV Connector from Rte 85 to Rte 101(Mountain View)

#### SCL-87: Route 101 I/C to Route 85 I/C

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Route 101 I/C to Route 85 I/C

Length = 9.6 miles

DATES: Dec 23, 2004 Opened; Rte 101 to Taylor Avenue

Mar 16, 2007 New Section; Rte 280 to SR 85

Jul 26, 2007 Extended; Taylor Avenue to Route 280

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Route 85 I/C (MP0.0) to Route 101 I/C (MP9.2)

Length = 9.2 miles

DATES: Apr 18, 2005 Opened; Taylor Avenue to Rte 101

Feb 4, 2007 New Section; SR 85 to Rte 280
May 24, 2007 Extended; Rte 280 to Taylor Avenue

#### SCL-101: San Mateo County Line to Cochrane Rd

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: San Mateo County Line (MP 52.6) to 0.5 mile north of Cochrane Rd

off-ramp (MP 18.4) Length = 34.2 miles

DATES: Nov 10, 1986 Opened; Lawrence Expwy to De La Cruz Blvd

Aug 8, 1988 Extended; Ellis St to Lawrence Expwy
Oct 10, 1988 Extended; N. Rengstorff Ave to Ellis St

Dec 12, 1988 Extended; San Mateo Co. Line to N. Rengstorff Ave
Jun 15, 1990 New section; Rte 101/280/680 I/C to north of Bernal Rd

Jan 29, 1993 Extended; Rte 880 to Rte 101/280/680 I/C

Apr 5, 1993 Extended; De La Cruz Blvd to Rte 880 Mar 19, 2003 Opened; Bernal Road to Cochrane Road

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Cochrane Rd on-ramp (MP 17.8) to San Mateo County Line (MP 52.6)

Length = 34.8 miles

DATES: Nov 7, 1986 Opened; Guadalupe Pkwy to Great America Pkwy

Oct 10, 1988 Extended; Great America Pkwy to N. Rengstorff Ave Dec 12, 1988 Extended; N. Rengstorff Ave to San Mateo Co. Line Jun 7, 1990 New section; Bernal Rd to Rte 101/280/680 I/C Feb 1, 1993 Extended; Rte 101/280/680 I/C to Old Oakland Rd Apr 5, 1993 Extended; Old Oakland Rd to Guadalupe Pkwy

May 19, 2003 Opened; Cochrane Rd to Bernal Road

#### SCL-237: Rte 880 to Mathilda Ave

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles

(ILEVs) with DMV issued decal.

WESTBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Jct. Rte 880/237 (MP 9.3) to east of Mathilda Ave (MP 3.2)

Length = 6.1 miles

DATES: Oct 31, 1984 Opened; Rte 880 to Lawrence Expwy; right side HOVL

Nov/Dec 1991 Extended; Lawrence Expwy to east of Mathilda Ave; right side HOVL

May 1, 1995 Rte 237 upgraded to fwy; HOVL relocated to left lane;

hours expanded to include the PM peak (3-7 PM)

May 1, 2005 Opened direct HOV connectors SB 880/WB 237

EASTBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Mathilda Ave (MP 2.8) to Jct Rte 880/237 (MP 9.3)

Length = 6.5 miles

DATES: Oct 31, 1984 Opened; Lawrence Expwy to Rte 880; right side HOVL

Nov/Dec 1991 Extended; Mathilda Ave to Rte 880

May 1, 1995 Rte 237 upgraded to fwy; HOVL relocated to left lane;

hours expanded to include the AM peak (5-9 AM)

Oct 2, 1996 Shortened; Mathilda Ave to 1.1 miles west of Rte 880 Apr. 29, 2005 Opened; Route 880/237 HOVL Direct Connector

#### SCL-280: Magdalena Ave to Leland Ave

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Magdalena Ave on-ramp (MP 14.0) to north of Meridian Ave (MP R4.2)

Length = 10.5 miles

DATES: Dec 1, 1990 Opened; Magdalena Ave to north of Meridian Ave

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: South of Leland Ave (MP L4.7) to Magdalena Ave off-ramp (MP 14.0)

Length = 10.8 miles

DATES: Nov 21, 1990 Opened; south of Leland Ave to Magdalena Ave

#### ALA/SCL-880: I-880/ 237 Junction to Mission Blvd

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Mission Blvd to Jct I-880/237

Length = 4.0 miles

DATES: May 1, 2005 Opened

August 11, 2007 Extended; Mission Blvd. To Jct I-880/SR237

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: I-880/237 Jct to Dixon Landing Road

Length = 1.3 miles

DATES: Apr 22, 2005 Opened

#### SM-101: Whipple Ave to Santa Clara County Line

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Whipple Ave (MP 6.9) to Santa Clara Co. Line (MP 0.0)

Length = 6.9 miles

DATES: Jul 18, 1991 Opened

NORTHBOUND HOURS: 5:00 - 9:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Santa Clara Co. Line (MP 0.0) to Whipple Ave (MP 6.6)

Length = 6.6 miles

DATES: Jul 16, 1991 Opened

#### **SOL-80: Route 29 to Contra Costa County Line**

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decals.

EASTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: Route 29 (MP 0.9) to Contra Costa County Line (MP 0.0)

Length = 0.9 mile

DATES: Nov 17, 2007 Extended; Route 29 to Contra Costa County Line

#### **SOL-80: Carquinez Bridge Toll Plaza**

OCCUPANCY Three or more persons per vehicle, motorcycles, 2-seat vehicles with 2 persons,

inherently low-emission vehicles (ILEVs) with DMV issued decals.

EASTBOUND HOURS: 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

LIMITS: 0.1 miles West of Toll Plaza (MP 0.5) to east of Toll Plaza (MP 0.6)

Length = 0.1 mile

DATES: Jul 1, 1991 Reduced 10c toll tickets for HOVs (with purchase of 50-ticket book)

Oct 1, 1995 Toll-free passage in designated booth only;

Two-seat vehicles with two occupants permitted

Jul 30, 1997 Opened; West of Toll Plaza to east of Toll Plaza

Aug 11, 2007 HOV Lane moved from toll booth #6 to toll booth #1

Oct 29, 2007 HOV allowed in Booth # 11

#### SON-101: Rte 12 to Wilfred Avenue

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission vehicles (ILEVs)

with DMV issued decal.

SOUTHBOUND HOURS: 7:00 - 9:00 AM, 3:00 - 6:30 PM, Monday thru Friday

LIMITS: Route 12 to North of Wilfred Avenue

Length = 4 miles

DATES: Nov 4, 2002 Opened.

Dec 11, 2003 Hours of Operation changed to 7-9 AM, 3-6:30 PM, MON - FRI

NORTHBOUND HOURS: 7:00 - 9:00 AM, 3:00 - 6:30 PM, Monday thru Friday

LIMITS: Wilfred Avenue to South of Route 12

Length = 4 miles

DATES: Nov 4, 2002 Opened.

Dec 11, 2003 Hours of Operation changed to 7-9 AM, 3-6:30 PM, MON - FRI

### **TOLL BRIDGE HOV BYPASS LANES**

#### **Antioch Bridges**

OCCUPANCY Three or more persons per vehicle, motorcycles, two-seat vehicles

with two occupants, inherently low-emission vehicles (ILEVs) with DMV issued decals.

HOURS 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

TOLL-FREE BOOTHS Antioch Lanes #2 and #3

DATES Jul 1, 1991

Reduced 10¢ toll tickets for HOVs (with purchase of 50-ticket book)

Oct 1, 1995 Toll-free passage in designated booth only;

Two-seat vehicles with two occupants permitted

#### **Benicia-Martinez Bridge**

OCCUPANCY Three or more persons per vehicle, motorcycles, two-seat vehicles

with two occupants, inherently low-emission vehicles (ILEVs) with DMV issued decals.

HOURS 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

TOLL-FREE

BOOTHS

Benicia Br. Left side bypass lane and lane #11

DATES See information in Mainline HOV Lane Section

### Richmond-San Rafael Bridge

OCCUPANCY Three or more persons per vehicle, motorcycles, two-seat vehicles

with two occupants, inherently low-emission vehicles (ILEVs) with DMV issued decals.

HOURS 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

TOLL-FREE BOOTH #3, #6

DATES Oct. 23, 1989 Toll-free passage in designated booth only;

Oct 1, 1995 Two-seat vehicles with two occupants permitted Oct 16, 2007 HOV allowed moved from booth #4 to booth #3

Oct 29, 2007 HOV allowed in Booth #6

### **TOLL BRIDGE HOV BYPASS LANES**

#### **Dumbarton Bridge**

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission

vehicles (ILEVs) with DMV issued decal.

HOURS 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

TOLL-FREE

BOOTHS

Dumbarton Left side bypass lane

DATES See information in Mainline HOV Lane section

#### San Mateo-Hayward Bridge

OCCUPANCY Two or more persons per vehicle, motorcycles, inherently low-emission

vehicles (ILEVs) with DMV issued decal.

HOURS 5:00 - 10:00 AM, 3:00 - 6:00 PM, Monday thru Friday

**TOLL-FREE** 

**BOOTHS** 

San Mateo Left side bypass lanes #1 and #2

DATES See information in Mainline HOV Lane section

### San Francisco-Oakland Bay Bridge

OCCUPANCY Three or more persons per vehicle, motorcycles, two-seat vehicles

with two occupants, inherently low-emissions vehicles (ILEVs)

with DMV issued decal.

HOURS 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

TOLL-FREE

**BOOTHS** 

#1, #2, Lanes 21 & 22

DATES See information in Ala-80 Mainline HOV Lane section

### **TOLL BRIDGE HOV BYPASS LANES**

### **Carquinez Bridge**

OCCUPANCY Three or more persons per vehicle, motorcycles, two-seat vehicles

with two occupants, inherently low-emissions vehicles (ILEVs)

with DMV issued decal.

HOURS 5:00 - 10:00 AM, 3:00 - 7:00 PM, Monday thru Friday

TOLL-FREE

#1, #11

BOOTHS

DATES See information in Sol-80 Mainline HOV lane section

# **MAINLINE HOV LANES**

# VOLUME/PERSON DATA and VIOLATION HISTORY

### Westbound - A.M.

San Francisco-Oakland Bay Bridge Toll Plaza

Typical data for 2007 (6)

#### PEAK PERIOD (5)

#### **PEAK HOUR**

6:00 - 10:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lanes	Mixed Flow Lanes		HOV Lanes	Mixed Flow Lanes
Motorcycles	639	_		166	_
Buses (4)	285	_		72	_
Carpools (1)	6480			2187	_
2 - seaters (2)	2292			724	
Hybrid	841		_	221	
Vanpools	151			46	
Violators	739			253	
TOTAL	11427	21868 <sup>(7)</sup>		3669	6237
PERSONS	HOV Lanes	Mixed Flow Lanes		HOV Lanes	Mixed Flow Lanes
Motorcycles	639			166	
Buses (4)	9975		_	2520	
Carpools (1)	20088		_	6780	
2 - seaters (2)	4584			1448	
Hybrid	841		_	221	
Vanpools	1510		_	460	
Violators	1060			372	
TOTAL	38697	25148 <sup>(7)</sup>		11967	7173
RATES					
HOV Lane Occupancy Rate	3.4 persons/veh		_	3.3 persons/veh	
Mixed Flow <sup>(7)</sup> Occupancy Rate	1.2 persons/veh		_	1.2 persons/veh	
Violation rate <sup>(3)</sup> (HOV Lane)	6.5 %			6.9 %	

- **NOTES:** (1) 3 or more persons per vehicle.
  - (2) 2 seater vehicles with 2 persons.
  - (3) Violation rate = no. of violators in HOV lane x 100%

    Total no. of vehicles in HOV lane
  - (4) Assumed AM bus occupancy = 35 persons/vehicle.
  - (5) HOV lanes in operation from 5:00 to 10:00 AM.
  - (6) Observations conducted 5/22/07 at the SFOBB Toll Plaza.
  - (7) Data from Toll Plaza Vehicle Registration Report.

### Westbound - P.M.

San Francisco-Oakland Bay Bridge Toll Plaza

Typical data for 2007 (6)

### PEAK PERIOD (5)

#### **PEAK HOUR**

3:00 - 7:00 PM

6:00 - 7:00 P.M.

	3:00 - 7:00 PM			6:00 - 7:00 P.M.		
VEHICLES	HOV Lanes	Mixed Flow Lanes		HOV Lanes	Mixed Flow Lanes	
Motorcycles	261	_		90	_	
Buses (4)	210	_		51	_	
Carpools <sup>(1)</sup>	1922	_		521	_	
2 - seaters (2)	463	_	_	119		
Hybrid	351	_	_	93		
Vanpools	57	_		11	_	
Violators	277		_	76	_	
TOTAL	3541	25826	(7)	961	6083	
PERSONS	HOV Lanes	Mixed Flow Lanes		HOV Lanes	Mixed Flow Lanes	
Motorcycles	261	_	_	90	_	
Buses (4)	3360	_	_	816		
Carpools (1)	5958	_	_	1615		
2 - seaters (2)	926	_	_	238		
Hybrid	351	_	_	93		
Vanpools	456		_	88		
Violators	425	_	_	123		
TOTAL	11737	30991	(7)	3063	7300	
RATES			_			
HOV Lane Occupancy Rate	3.3	persons/veh		3.2	persons/veh	
Mixed Flow <sup>(7)</sup> Occupancy Rate	1.2	persons/veh	_	1.2	persons/veh	
Violation rate <sup>(3)</sup> (HOV Lane)	7.8	%		7.9	%	

- **NOTES:** (1) 3 or more persons per vehicle.
  - (2) 2 seater vehicles with 2 persons.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) Assumed PM bus occupancy = 16 persons/vehicle.
- (5) HOV lanes in operation from 3:00 to 7:00 P.M.
- (6) Observations conducted 5/23/07 at the SFOBB Toll Plaza.
- (7) Data from Toll Plaza Hourly Vehicle Registration Report.

# **Violation History**

San Francisco-Oakland Bay Bridge

#### Westbound

By Time

	DATE	TOTAL HOVL VOLUME	VIOLATION RATE	Lanes 1 & 2	Lanes 21&22	5 - 6 AM	6 - 7 AM	7 - 8 AM	8 - 9 AM	9 - 10 AM
A.M.	Tue May 22, 2007	11427	6.5%	8.0%	4.9%		10.0%	6.9%	4.0%	5.2%
PEAK	Wed May 31, 2006	10394	9.7%	10.3%	9.1%		18.4%	6.8%	6.0%	5.9%
	Tue Nov 15, 2005	10261	9.9%	8.7%	11.2%		13.3%	8.1%	5.8%	16.1%
	Wed Nov 3, 2004	10917	10.0%	8.2%	11.7%	21.4%	12.5%	7.9%	6.3%	9.0%
	Wed May 28, 2003	10803	8.2%	7.4%	9.0%	15.5%	8.4%	7.0%	6.1%	9.6%
	Thu May 9, 2002	11481	9.5%	4.9%	13.8%	22.4%	12.0%	7.5%	3.8%	10.5%
	Wed May 23, 2001	13100	10.0%	7.2%	12.8%	22.3%	12.2%	5.8%	6.9%	10.4%
	Thu Nov 9, 2000	12991	14.7%	8.9%	19.9%	37.8%	16.9%	10.4%	6.4%	14.3%
	Thu Oct 14, 1999	11644	19.5%	9.8%	29.7%	60.1%	32.6%	7.7%	6.9%	11.5%
	Tue Apr 21, 1998	9696	10.6%	7.6%	12.5%	14.2%	22.7%	6.4%	4.1%	9.2%
	Wed Jun 11, 1997	7655	10.9%	1.0%	12.4%	20.9%	10.6%	8.1%	6.0%	21.5%
	Tue Apr 23, 1996	7258	10.6%	10.9%	9.6%	17.1%	12.5%	8.2%	7.5%	16.9%
							3 - 4 PM	4 - 5 PM	5 - 6 PM	6 - 7 PM
P.M.	Wed May 23, 2007	3541	7.8%	5.9%	10.4%		9.4%	7.0%	7.3%	7.9%
PEAK	Thu Oct 19, 2006	3645	14.9%	11.0%	19.0%		15.2%	14.8%	14.3%	15.5%
	Tue Oct 25, 2005	3106	16.3%	18.5%	13.5%		20.2%	13.5%	13.9%	18.5%
	Thu Oct 28, 2004	3290	9.1%	10.6%	7.0%		10.9%	7.9%	8.1%	9.6%
	Tue May 27, 2003	3891	14.7%	17.2%	11.8%		24.4%	11.7%	9.3%	15.7%
	Wed Sep 18, 2002	3327	11.7%	12.7%	15.0%		16.5%	11.6%	10.9%	15.8%
	Wed Oct 3, 2001	3602	9.8%	10.6%	8.8%		12.6%	7.6%	9.3%	10.1%
	Thu Oct 19, 2000	3673	25.6%	17.0%	33.3%		32.0%	24.4%	21.1%	0.253
	Thu Oct 14, 1999	3193	10.6%	12.0%	9.0%		15.6%	10.4%	7.6%	9.7%
	Tue Oct 20, 1998	2335	19.1%	15.6%	21.6%		26.6%	24.9%	10.1%	17.0%
	Wed Jun 11, 1997	1905	17.0%	19.2%	12.5%		23.0%	14.3%	13.7%	

By Lane

- **NOTES:** (a) Two-seater vehicles with 2 persons allowed in HOVL effective October 1, 1995.
  - (b) Hours of operation were extended from 3-6 PM to 3-7 PM on February 2, 1998.
  - (c) Hours of operation from 5:00 to 10:00 AM and 3:00 to 7:00 PM.

### Westbound - A.M.

#### **HOV FLYOVER RAMP**

Powell Street to SFOBB

Typical data for 2007

#### PEAK PERIOD (4

#### **PEAK HOUR**

6:00 - 10:00 AM

6:00 - 7:00 AM

VEHICLES	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles	171		55	_
Buses	72		25	
Carpool <sup>(1)</sup>	2501		792	<u> </u>
2 - seaters (2)	692		285	
Hybrid _	313		62	
Vanpools _	88		42	
Violators	491		222	
TOTAL	4328	N/A	1483	N/A
PERSONS	HOV Lane	SOV Lane	HOV Lane	SOV Lane
Motorcycles _	171	_	55	
Buses _	2520		875	<u> </u>
Carpool <sup>(1)</sup> _	7753		2455	
2 - seaters (2)	1384		570	
Hybrid _	313		62	
Vanpools _	880		420	
Violators	1407	_	381	
TOTAL	14428	N/A	4818	N/A
RATES				
HOV Lane occupancy rate	3.3	persons/veh	3.2	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	11.3	%	15.0	%

- **NOTES:** (1) 3 or more persons per vehicle.
  - (2) 2 seater vehicles with 2 persons.
  - (3) Violation rate = no. of violators in HOV lane x 100%

- (4) Assumed AM bus occupancy = 35 persons/vehicle
- (5) HOV lane in operation from 5:00 to 10:00 AM.
- (6) Observations conducted 5/24/07 at the downstream touchdown of the flyover

## Westbound - P.M.

#### **HOV FLYOVER RAMP**

Powell Street to SFOBB

Typical data for 2007

#### PEAK PERIOD (

#### **PEAK HOUR**

3:00 - 7:00 PM

6:00 - 7:00 PM

VEHICLES	HOV Lane	SOV Lane	 HOV Lane	SOV Lane
Motorcycles	88		32	_
Buses	109	_	23	_
Carpool (1)	791		 205	
2 - seaters (2)	190		 40	
Hybrid	139		 40	
Vanpools	10		 2	
Violators	163	_	45	
TOTAL	1490	N/A	387	N/A
PERSONS	HOV Lane	SOV Lane	 HOV Lane	SOV Lane
Motorcycles	88	_	32	_
Buses	1744		 368	
Carpool (1)	2452		 636	<u> </u>
2 - seaters (2)	380		 80	
Hybrid	139		 40	
Vanpools	80		 16	<u> </u>
Violators	231		63	
TOTAL	5114	N/A	1235	N/A
RATES				
HOV Lane occupancy rate	3.4 persons/veh		3.2	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	10.9	%	11.6	%

- **NOTES:** (1) 3 or more persons per vehicle.
  - $(2) \ \ 2 \ seater \ vehicles \ with \ 2 \ persons.$
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) Assumed PM bus occupancy = 16 persons/vehicle
- (5) HOV lane in operation from 3:00 to 7:00 PM.
- (6) Observations conducted 9/27/07 at the downstream touchdown of the flyover.

### **HOV FLYOVER RAMP**

Powell Street to SFOBB

### **Violation History** Westbound

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu May 24, 2007	6:00 - 10:00 AM	4328	11.3%
Thu Jun 8, 2006	5:00 - 10:00 AM	5462	16.3%
Thu Jun 2, 2005	6:00 - 10:00 AM	4848	13.3%
Tue Dec 14, 2004	6:00 - 10:00 AM	2937	16.3%
Wed Nov 5, 2003	6:00 - 10:00 AM	4286	13.9%
Wed May 29, 2002	6:00 - 10:00 AM	4644	2.9%
Wed Mar 28, 2001	5:00 - 10:00 AM	5108	18.6%
Wed May 17, 2000	5:00 - 10:00 AM	5274	16.5%
Wed Apr 21, 1999	7:00 - 10:00 AM	3900	5.6%
Tue Oct 20, 1998	5:00 - 10:00 AM	4575	20.4%

#### P.M. PEAK

Thu Sep 27, 2007	3:00 - 7:00 PM	1490	10.9%
Wed Oct 25, 2006	3:00 - 7:00 PM	1227	16.2%
Wed May 18, 2005	3:00 - 7:00 PM	1209	20.6%
Wed Nov 3, 2004	3:00 - 6:00 PM	953	17.5%
Tue Nov 4, 2003	3:00 - 6:00 PM	839	26.8%
Tue Sep 17, 2002	3:00 - 7:00 PM	1123	20.4%
Wed Oct 3, 2001	3:00 - 7:00 PM	1045	26.1%
Tue Dec 12, 2000	3:00 - 5:00 PM	490	16.1%
Wed Feb 3, 1999	3:00 - 7:00 PM	946	30.7%
Wed Oct 7, 1998	3:00 - 7:00 PM	1055	22.7%

#### NOTES:

- (a) Morning period of operation from 5:00 to 10:00 AM
- (b) Evening period of operation from 3:00 to 7:00 PM.

### Westbound - A.M.

Contra Costa County Line to Powell Street

Typical data for 2007 (5)

#### **PEAK PERIOD**

#### **PEAK HOUR**

6:00 - 10:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	207	79	51	26
Buses	75	23	18	4
Carpools (1)	4186	914	1371	381
Hybrid	489	88	119	16
Vanpools	116	9	25	4
Single Occ. (2)	_	26909		6783
Violators	636	_	173	
TOTAL	5709	28022	1757	7214
PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	207	79	51	26
Buses _	2625	805	630	140
Carpools (1)	11879	2362	3905	1018
Hybrid _	489	88	119	16
Vanpools _	1160	90	250	40
Single Occ. (2)	_	29460		7478
Violators	805		235	
TOTAL	17165	32884	5190	8718
RATES				
HOV Lane occupancy rate	3.0	) persons/veh	3.0	persons/veh
Mixed Flow occupancy rate	1.2	2 persons/veh	1.2	persons/veh
Overall occupancy (incl. buses)	1.5	persons/veh	1.6	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	11.1	%	9.8	%

- **NOTES:** (1) 3 or more persons per vehicle & 2 seater vehicles with 2 persons.
  - (2) Mixed flow lanes only.
  - (3) Violation rate = no. of violators in HOV lane x 100%

Total no. of vehicles in HOV lane

- (4) HOV lane in operation from 5:00 to 10:00 A.M.
- (5) Observations conducted 5/16/07 at Ashby Avenue Interchange.

(HOV Lane)

### Eastbound - P.M.

I-880 Viaduct to Contra Costa County Line

Violators

Typical data for 2007 (5)

#### PEAK PERIOD (4)

#### **PEAK HOUR** 6:00 - 7:00 PM

3:00 - 7:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	258	29	59	10
Buses	102	10	37	1
Carpools <sup>(1)</sup>	3443	934	949	284
Hybrid	414	98	112	34
Vanpools	122	18	13	3
1 and 2 Occ. <sup>(2)</sup>	_	25419	_	6845

Mixed Flow

Lanes

370 **TOTAL** 4709 26508

**HOV Lane** 

HOV Lane	Lanes
59	10
37	1
949	284
112	34
13	3
_	6845
89	_
1259	7177

# **PERSONS**

_		
Motorcycles	258	29
Buses	3570	350
Carpools (1)	9810	2527
Hybrid	414	98
Vanpools	1220	180
1 and 2 Occ. (2)	_	29758
Violators	540	_
TOTAL	15812	32942

HOV Lane	Mixed Flow Lanes
59	10
1295	35
2744	778
112	34
130	30
	7864
123	_
4463	8751

#### **RATES**

HOV Lane occupancy rate	3.4 persons/veh	3.5 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh	1.2 persons/veh
Overall occupancy (incl. buses)	1.6 persons/veh	1.6 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	7.9 %	7.1 %
		·

**NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 5/16/07 at Ashby Avenue Interchange.

## **Violation History**

Contra Costa County Line to Powell Street

#### Westbound

**VIOLATION** 

#### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Wed May 16, 2007	6:00 - 10:00 AM	5709	11.1%
Thu May 25, 2006	6:00 - 10:00 AM	5114	9.2%
Wed Nov 16, 2005	7:00 - 10:00 AM	3907	9.0%
Wed Nov 17, 2004	7:00 - 10:00 AM	3734	7.9%
Tue Jun 10, 2003	6:00 - 10:00 AM	5181	4.4%
Wed May 8, 2002	6:00 - 10:00 AM	5414	8.7%
Wed May 16, 2001	6:00 - 10:00 AM	5289	13.8%
Thu Oct 5, 2000	7:00 - 10:00 AM	3184	18.5%
Thu Apr 15, 1999	7:00 - 10:00 AM	3156	11.0%
Thu Oct 8, 1998	7:00 - 10:00 AM	3019	8.8%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Thu May 9, 2002	3:00 - 7:00 PM	3102	18.9%
Thu May 10, 2001	3:00 - 7:00 PM	1936	24.4%
Thu Jun 1, 2000	3:00 - 7:00 PM	2593	25.9%
Thu Apr 15, 1999	3:00 - 7:00 PM	2710	21.4%
Thu Oct 8, 1998	3:00 - 7:00 PM	1943	20.5%

- **NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak directions.

# **Violation History**

I-880 Viaduct to Contra Costa County Line

#### **Eastbound**

**VIOLATION** 

#### A.M. PEAK

MONITORED	VOLUME	RATE
-	-	_
-	-	-
-	-	-
-	-	-
-	-	-
6:00 - 10:00 PM	677	17.6%
6:00 - 10:00 PM	606	21.5%
7:00 - 10:00 PM	221	7.7%
7:00 - 10:00 PM	531	20.9%
7:00 - 10:00 PM	311	16.7%
	- - - - 6:00 - 10:00 PM 6:00 - 10:00 PM 7:00 - 10:00 PM	

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Wed May 16, 2007	3:00 - 7:00 PM	4709	7.9%
Wed May 10, 2006	3:00 - 7:00 PM	5415	10.3%
Tue May 17, 2005	3:00 - 7:00 PM	5048	14.7%
Wed Nov 17, 2004	3:00 - 5:00 PM	1995	21.5%
Thu May 29, 2003	3:00 - 7:00 PM	4225	9.3%
Thu May 16, 2002	3:00 - 7:00 PM	4535	2.7%
Thu Sep 27, 2001	3:00 - 7:00 PM	4655	6.5%
Thu Sep 14, 2000	3:00 - 7:00 PM	4415	3.4%
Wed Oct 20, 1999	3:00 - 7:00 PM	4287	1.3%
Tue Dec 15, 1998	3:00 - 5:00 PM	1415	7.1%

- **NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM
  - (b) Evening period of operation from 3:00 to 7:00 PM
  - (c) Data was not collected in 2007 for off- peak direction

### Westbound - A.M.

Newark Boulevard to Dumbarton Bridge Toll Plaza

Typical data for 2007 (5)

PF	ΔK	<b>PER</b>		(4)
ГЬ	$\neg$		IUU	

#### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	75	0		29	0
Buses	27	3	_	11	0
Carpools <sup>(1)</sup>	2813	28	_	1298	11
Vanpools	12	1	_	3	0
Hybrid/Single Occ. (2)	163	10663		58	3969
Violators	24	_	_	9	_
TOTAL	3114	10695	_	1408	3980
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	75	0	_	29	0
Buses	945	105	_	385	0
Carpools <sup>(1)</sup>	5783	58	. <u> </u>	2664	23
Vanpools	120	10	_	30	0
Hybrid/Single Occ. (2)	163	10663	_	58	3969
Violators	24	_	_	9	
TOTAL	7110	10836		3175	3992
RATES			_		
HOV Lane occupancy rate	2.3	persons/veh	_	2.3	persons/veh
Mixed Flow occupancy rate	1.0	persons/veh		1.0	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh		1.3	persons/veh
Violation rate (HOV Lane)	0.8	%	_	0.6	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 5:00\ to\ 10:00\ A.M.$
- (5) Observations conducted 11/07/07 at Dumbarton Bridge Toll Plaza

### Westbound - P.M.

Newark Boulevard to Dumbarton Bridge Toll Plaza

Typical data for 2007 (5)

PEAK PERIOD (	4)
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#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lan	Mixed Flow e Lanes
Motorcycles	27	0	12	0
Buses	13	5	4	2
Carpools <sup>(1)</sup> _	1063	160	424	64
Vanpools	2	0	1	0
Hybrid/Single Occ. (2)	38	2942	18	1065
Violators	5		1	
TOTAL	1148	3107	460	1131

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	27	0	12	0
Buses	455	175	140	70
Carpools <sup>(1)</sup> _	2270	342	910	136
Vanpools _	20	0	10	0
Hybrid/Single Occ. (2)	38	2942	18	1065
Violators	5		1	
TOTAL	2815	3459	1091	1271

#### **RATES**

HOV Lane occupancy rate	2.5 persons/veh	2.4 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.5 persons/veh	1.5 persons/veh
Violation rate (HOV Lane)	0.4 %	0.2 %

**NOTES:** 1) Two or more persons per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 3:00\ to\ 6:00\ P.M.$
- (5) Observations conducted 04/04/07 at Dumbarton Bridge Toll Plaza.

# **Violation History**

Newark Boulevard to Dumbarton Bridge Toll Plaza

#### Westbound

#### A.M. PEAK

PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
6:00 - 9:00 AM	3114	0.8%
6:00 - 9:00 AM	3045	0.6%
6:00 - 9:00 AM	2769	1.4%
6:00 - 9:00 AM	2495	0.6%
6:00 - 9:00 AM	2496	0.9%
6:00 - 9:00 AM	3044	3.5%
6:00 - 10:00 AM	4480	3.1%
6:00 - 9:00 AM	4106	3.5%
6:00 - 9:00 AM	3906	5.7%
6:00 - 9:00 AM	3601	0.4%
6:00 - 9:00 AM	2900	16.9%
6:00 - 10:00 AM	3095	15.0%
	6:00 - 9:00 AM 6:00 - 10:00 AM 6:00 - 9:00 AM 6:00 - 9:00 AM 6:00 - 9:00 AM	MONITORED         VOLUME           6:00 - 9:00 AM         3114           6:00 - 9:00 AM         3045           6:00 - 9:00 AM         2769           6:00 - 9:00 AM         2495           6:00 - 9:00 AM         2496           6:00 - 9:00 AM         3044           6:00 - 10:00 AM         4480           6:00 - 9:00 AM         4106           6:00 - 9:00 AM         3906           6:00 - 9:00 AM         3601           6:00 - 9:00 AM         2900

#### P.M. PEAK

Wed Apr 4, 2007	3:00 - 6:00 PM	1148	0.4%
Tue Sep 26, 2006	3:00 - 6:00 PM	1035	1.0%
Tue May 10, 2005	3:00 - 6:00 PM	1032	1.1%
Year 2004	-	-	-
Thu May 8, 2003	3:00 - 6:00 PM	995	1.1%
Wed Jun 12, 2002	3:00 - 6:00 PM	959	1.8%
Tue Mar 20, 2001	3:00 - 6:00 PM	919	2.2%
Thu Oct 19, 2000	3:00 - 6:00 PM	849	3.1%
Wed Sep 22, 1999	3:00 - 6:00 PM	949	2.0%
Wed Apr 15, 1998	3:00 - 6:00 PM	981	1.6%
Thu Oct 2, 1997	3:00 - 6:00 PM	819	6.6%
Tue May 14, 1996	3:00 - 6:00 PM	605	2.8%
Thu Mar 30, 1995	3:00 - 6:00 PM	709	3.8%

**NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM.

<sup>(</sup>b) Evening period of operation from 3:00 to 6:00 PM.

<sup>(</sup>c) Data was not collected in 2004 for off-peak direction

### Westbound - A.M.

Hesperian Boulevard to San Mateo Bridge Toll Plaza

Typical data for 2007 (5)

PEAK PERIOD	(4)
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#### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

1.7 %

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	67	11	_	25	1
Buses	13	0	. =	5	0
Carpools <sup>(1)</sup>	2525	107		1093	38
Vanpools	20	1		11	0
Hybrid/Single Occ. (2)	78	11166		25	3974
Violators	44	_	_	20	_
TOTAL	2747	11285	_	1179	4013
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	67	11	_	25	1
Buses	455	0		175	0
Carpools <sup>(1)</sup>	5227	217	. =	2299	76
Vanpools	200	10		110	0
Hybrid/Single Occ. (2)	78	11166		25	3974
Violators	44	_		20	_
TOTAL	6071	11404		2654	4051
RATES					
HOV Lane occupancy rate	2.2	persons/veh		2.3	persons/veh
Mixed Flow occupancy rate	1.0 persons/veh		_	1.0 persons/ve	
Overall occupancy (incl. buses)	1.2	persons/veh		1.3	persons/veh

**NOTES:** (1) Two or more persons per vehicle.

1.6 %

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

Total no. of vehicles in HOV lane

- (4) HOV lane in operation from 5:00 to 10:00 A.M.
- (5) Observations conducted 03/15/07 at San Mateo Bridge Toll Plaza.

Violation rate

(HOV Lane)

### Westbound - P.M.

Hesperian Boulevard to San Mateo Bridge Toll Plaza

Typical data for 2007 (5)

P	EΑ	١K	P	ER	10	D	(4)
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#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	. <u>-</u>	HOV Lane	Mixed Flow Lanes
Motorcycles	29	4		9	0
Buses	13	2		2	1
Carpools (1)	1495	525	_	563	162
Vanpools	16	5		9	2
Hybrid/Single Occ. (2)	38	6250		17	2384
Violators	11			4	_
TOTAL	1602	6786		604	2549
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	29	4	_	9	0
Buses	455	70		70	35
Carpools <sup>(1)</sup>	3408	1108		1267	336
Vanpools	160	50	_	90	20
Hybrid/Single Occ. (2)	38	6250		17	2384
Violators	11	_		4	_
TOTAL	4101	7482		1457	2775
RATES					
HOV Lane occupancy rate	2.6 persons/veh			2.4 persons/veh	
Mixed Flow occupancy rate	1.1 persons/veh		1.1 persons/veh 1.1 p		persons/veh

**NOTES:** (1) Two or more persons per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

1.4 persons/veh

0.7 %

Total no. of vehicles in HOV lane

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 3:00\ to\ 6:00\ P.M.$
- (5) Observations conducted 04/05/07 at San Mateo Bridge Toll Plaza.

Overall occupancy

(incl. buses)

Violation rate

(HOV Lane)

1.3 persons/veh

0.7 %

# **Violation History**

Hesperian Blvd. to West of San Mateo - Hayward Bridge Toll Plaza

#### Westbound

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu Mar 15, 2007	6:00 - 9:00 AM	2747	1.6%
Wed Mar 8, 2006	6:00 - 9:00 AM	2452	1.3%
Tue May 24, 2005	6:00 - 9:00 AM	2448	1.1%
Wed Oct 13, 2004	6:00 - 9:00 AM	2218	2.3%
Thu May 29, 2003	6:00 - 9:00 AM	2449	1.3%
Tue Apr 30, 2002	6:00 - 9:00 AM	1834	3.9%
Thu Sep 20, 2001	6:00 - 9:00 AM	2075	8.1%
Tue Oct 24, 2000	6:00 - 9:00 AM	2480	8.2%
Wed Mar 17, 1999	6:00 - 9:00 AM	2534	9.4%
Tue Mar 17, 1998	6:00 - 9:00 AM	2255	8.2%
Tue Oct 7, 1997	6:00 - 9:00 AM	2111	14.9%
Tue Apr 30, 1996	6:00 - 10:00 AM	1899	11.2%

#### P.M. PEAK

Thu Mar 15, 2007	3:00 - 6:00 PM	1602	0.7%
Thu Sep 21, 2006	3:00 - 6:00 PM	1518	2.0%
Tue Sep 13, 2005	3:00 - 6:00 PM	1318	0.5%
Year 2004	-	-	-
Tue Jun 11, 2002	3:00 - 6:00 PM	1275	4.4%
Wed Oct 3, 2001	3:00 - 6:00 PM	1177	5.4%
Thu Apr 13, 2000	3:00 - 6:00 PM	1243	1.4%
Thu Mar 4, 1999	3:00 - 6:00 PM	1128	3.2%
Thu Mar 26, 1998	3:00 - 6:00 PM	1210	3.8%
Wed Oct 8, 1997	3:00 - 6:00 PM	1138	6.8%
Tue Apr 30, 1996	3:00 - 6:00 PM	973	7.9%
Tue Apr 4, 1995	3:00 - 6:00 PM	944	10.3%

**NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM.

<sup>(</sup>b) Evening period of operation from 3:00 to 6:00 PM.

<sup>(</sup>c) Data was not collected in 2004 for off-peak direction

### Southbound - A.M.

Route 84 to Route 237 Calaveras Blvd.

Typical data for 2007 (5)

<b>PEAK PERIO</b>	D	(4)
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#### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	81	5		30	2
Buses	2	1	_	1	1
Carpools (1)	2091	53		664	30
Vanpools	14	0		5	0
Hybrid/Single Occ. (2)	184	14865		70	5317
Violators	82	_	_	14	_
TOTAL	2454	14924		784	5350
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	81	5		30	2
Buses	70	35		35	35
Carpools <sup>(1)</sup>	4377	108		1429	62
Vanpools	140	0	_	50	0
Hybrid/Single Occ. (2)	184	14865	_	70	5317
Violators	82			14	
TOTAL	4934	15013		1628	5416
RATES			_		
HOV Lane occupancy rate	2.0	persons/veh		2.1	persons/veh
Mixed Flow occupancy rate	1.0	persons/veh		1.0	persons/veh
Overall occupancy (incl. buses)	1.1	persons/veh	_	1.1	persons/veh
Violation rate  (HOV Lane)	3.3	%		1.8	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

Total no. of vehicles in HOV lane

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 09/19/07 at Vargas Rd. I/C.

(HOV Lane)

### Southbound - P.M.

Route 84 to Route 237 Calaveras Blvd.

Typical data for 2007 (5)

P	F	K	PF	RI	0	n	(4)
		•••			•	_	

#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	22	28		12	13
Buses	0	7		0	1
Carpools (1)	1348	1289		453	483
Vanpools	19	18		2	5
Hybrid/Single Occ. (2)	40	10255		19	3549
Violators	52	_		8	<u>—</u>
TOTAL	1481	11597	_	494	4051
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	22	28		12	13
Buses	0	245		0	35
Carpools <sup>(1)</sup>	2852	2738	_	962	1016
Vanpools	190	180	_	20	50
Hybrid/Single Occ. (2)	40	10255	_	19	3549
Violators	52		_	8	_
TOTAL	3156	13446		1021	4663
RATES			_		
HOV Lane occupancy rate	2.1	persons/veh		2.1	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh		1.2	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.3	persons/veh
Violation rate  (HOV Lane)	3.5	%	_	1.6	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

Total no. of vehicles in HOV lane

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 3:00\ to\ 7:00\ P.M.$
- (5) Observations conducted 06/05/07 at Vargas Rd I/C.

(HOV Lane)

Route 84 to Route 237 Calaveras Blvd.

# Violation History Southtbound

# A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Wed Sep 19, 2007	6:00 - 9:00 AM	2454	3.3%
Tue Jun 13, 2006	6:00 - 9:00 AM	2121	3.0%
Tue Oct 4, 2005	6:00 - 9:00 AM	2133	3.6%
Thu Dec 2, 2004	6:00 - 9:00 AM	1970	9.8%
Thu Oct 9, 2003	6:00 - 9:00 AM	2138	0.2%
Thu Dec 5, 2002	6:00 - 9:00 AM	1098	4.4%

#### P.M. PEAK

Tue Jun 5, 2007	3:00 - 6:00 PM	1481	3.5%
Tue Sep 19, 2006	3:00 - 6:00 PM	1669	1.1%
Thu Nov 3, 2005	3:00 - 6:00 PM	1752	1.0%
Year 2004	-	-	-
Tue Jun 3, 2003	3:00 - 6:00 PM	1149	4.4%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

- (b) Evening period of operation from 3:00 to 7:00 PM.
- (c) Data was not collected in 2004 for off-peak direction

### Southbound - A.M.

Marina Boulevard to Whipple Road

Typical data for 2007 (5)

<b>PEA</b>	K P	ERI	OD	(4)
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#### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	84	5	_	32	4
Buses	14	45		5	11
Carpools (1)	2348	249		777	119
Vanpools	51	3		17	3
Hybrid/Single Occ. (2)	311	13483	_	106	4547
Violators	115	_	_	44	_
TOTAL	2923	13785	_	981	4684
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	84	5	_	32	4
Buses	490	1575		175	385
Carpools <sup>(1)</sup>	4787	538	_	1598	255
Vanpools	510	30	_	170	30
Hybrid/Single Occ. (2)	311	13483	_	106	4547
Violators	115		_	44	
TOTAL	6297	15631		2125	5221
RATES			. <u>-</u>		
HOV Lane occupancy rate	2.2	persons/veh		2.2	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.3	persons/veh
Violation rate (3) (HOV Lane)	3.9	%	-	4.5	%

**NOTES:** (1) Two or more persons per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 9:00 P.M.
- (5) Observations conducted 03/22/07 at Tennyson Road I/C.

### Southbound - P.M.

Marina Boulevard to Whipple Road

**VEHICLES** 

Typical data for 2007 (5)

**PEAK HOUR** 

3:00 - 6:00 PM		4:00 - 5	5:00 PM
HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
60	6	24	2
10	26	1	16

Motorcycles **Buses** Carpools (1) 2776 656 Vanpools 24 28 Hybrid/Single Occ. (2) 81 13949 Violators 55

**TOTAL** 3010 14661

HOV Lane	Mixed Flow Lanes
24	2
1	16
995	215
11	15
36	4706
1	
1068	4954

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	60	6	24	2
Buses	350	910	35	560
Carpools (1)	5798	1402	2063	453
Vanpools	280	240	110	150
Hybrid/Single Occ. (2)	81	13949	36	4706
Violators	55		1	_
TOTAL	6624	16507	2269	5871

PEAK PERIOD (4)

#### **RATES**

HOV Lane occupancy rate	2.2 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.2 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.4 persons/veh
Violation rate (3) (HOV Lane)	1.8 %	0.1 %

**NOTES:** (1) Two or more persons per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 10/11/07 at Tennyson Road I/C.

### Northbound - A.M.

Whipple Road to South of Route 238

Typical data for 2007 (5)

#### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	67	5		29	4
Buses	31	12	_	11	3
Carpools (1)	2300	126		897	48
Vanpools	11	8	_	4	1
Hybrid/Single Occ. (2)	68	14220		30	5259
Violators	8	_	_	2	_
TOTAL	2485	14371		973	5315
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	67	5		29	4
Buses	1085	420		385	105
Carpools <sup>(1)</sup>	4711	270	_	1857	100
Vanpools	110	80	_	40	10
Hybrid/Single Occ. (2)	68	14220		30	5259
Violators	8		_	2	_
TOTAL	6049	14995	_	2343	5478
RATES			_		
HOV Lane occupancy rate	2.4	persons/veh		2.4	persons/veh
Mixed Flow occupancy rate	1.0	persons/veh		1.0	persons/veh
Overall occupancy (incl. buses)	1.2	persons/veh	_	1.2	persons/veh
Violation rate  (HOV Lane)	0.3	%	_	0.2	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

Total no. of vehicles in HOV lane

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 5:00\ to\ 9:00\ A.M.$
- (5) Observations conducted 10/03/07 at Tennyson Road I/C.

(HOV Lane)

### Northbound - P.M.

Whipple Road to South of Route 238

Typical data for 2007 (5)

<b>PEAK PERIOD</b>	(4)
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#### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	110	6	_	38	4
Buses	34	10	_	12	3
Carpools (1)	3189	448		1080	153
Vanpools	26	3	_	7	1
Hybrid/Single Occ. (2)	149	14036	_	53	4877
Violators	55	_		3	_
TOTAL	3563	14503		1193	5038
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	110	6	_	38	4
Buses	1190	350		420	105
Carpools <sup>(1)</sup>	6542	975	_	2212	340
Vanpools	260	30		70	10
Hybrid/Single Occ. (2)	149	14036		53	4877
Violators	55	_		3	_
TOTAL	8306	15397		2796	5336
RATES					
HOV Lane occupancy rate	2.3	persons/veh		2.3	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.3	persons/veh
Violation rate (HOV Lane)	1.5	%	_	0.3	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 09/26/07 at Tennyson Road I/C.

Marina Boulevard to Whipple Road

# **Violation History**

#### **Southbound**

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu Mar 22, 2007	6:00 - 9:00 AM	2923	3.9%
Wed Oct 4, 2006	6:00 - 9:00 AM	2361	3.2%
Wed Mar 30, 2005	6:00 - 9:00 AM	2278	2.9%
Wed Nov 3, 2004	6:00 - 9:00 AM	2723	3.6%
Tue Oct 7, 2003	6:00 - 9:00 AM	3049	3.7%
Tue Jun 11, 2002	6:00 - 9:00 AM	3638	7.5%
Wed Mar 21, 2001	6:00 - 9:00 AM	3971	5.2%
Tue May 9, 2000	6:00 - 9:00 AM	3661	4.6%
Thu Mar 4, 1999	6:00 - 9:00 AM	3012	5.7%
Tue Oct 27, 1998	6:00 - 9:00 AM	2958	10.1%
Thu May 8, 1997	6:00 - 9:00 AM	2257	16.0%
Tue May 21, 1996	6:00 - 9:00 AM	1926	13.7%

#### P.M. PEAK

Thu Oct 11, 2007	3:00 - 6:00 PM	3010	1.8%
Thu Sep 28, 2006	3:00 - 6:00 PM	2494	1.5%
Tue Nov 8, 2005	3:00 - 6:00 PM	3053	2.0%
Wed Dec 1, 2004	3:00 - 6:00 PM	3036	2.6%
Wed Jun 4, 2003	3:00 - 6:00 PM	3708	6.0%
Wed Jun 5, 2002	3:00 - 6:00 PM	3401	5.2%
Thu Apr 26, 2001	3:00 - 6:00 PM	3134	3.9%
Tue May 9, 2000	3:00 - 6:00 PM	2484	5.6%
Tue Mar 2, 1999	3:00 - 6:00 PM	2307	4.3%
Tue Oct 27, 1998	3:00 - 6:00 PM	2218	6.0%
Wed May 7, 1997	3:00 - 7:00 PM	2665	8.0%
Tue May 7, 1996	3:00 - 7:00 PM	2609	4.2%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

Whipple Road to South of Route 238

# **Violation History**

#### **Northbound**

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Wed Oct 3, 2007	6:00 - 9:00 AM	2485	0.3%
Thu Dec 7, 2006	6:00 - 9:00 AM	2449	2.2%
Thu Oct 6, 2005	6:00 - 9:00 AM	2735	2.0%
Tue Nov 2, 2004	6:00 - 9:00 AM	2954	5.3%
Thu May 22, 2003	6:00 - 9:00 AM	2920	1.4%
Thu Sep 12, 2002	6:00 - 9:00 AM	2560	8.8%
Thu Oct 11, 2001	6:00 - 9:00 AM	2212	5.2%
Tue Nov 7, 2000	6:00 - 9:00 AM	1648	7.6%
Tue Nov 2, 1999	6:00 - 9:00 AM	1845	8.1%
Wed Oct 28, 1998	6:00 - 9:00 AM	1582	17.2%
Wed Oct 8, 1997	6:00 - 9:00 AM	1147	12.7%
Tue Nov 5, 1996	6:00 - 9:00 AM	2291	8.1%

#### P.M. PEAK

Wed Sep 26, 2007	3:00 - 6:00 PM	3563	1.5%
Tue Oct 24, 2006	3:00 - 6:00 PM	3203	1.1%
Tue Apr 5, 2005	3:00 - 6:00 PM	3780	2.8%
Tue Nov 30, 2004	3:00 - 6:00 PM	3422	1.6%
Thu Oct 9, 2003	3:00 - 6:00 PM	3657	3.0%
Wed May 8, 2002	3:00 - 6:00 PM	3878	8.4%
Wed May 2, 2001	3:00 - 6:00 PM	4069	4.8%
Thu Oct 5, 2000	3:00 - 6:00 PM	4433	6.4%
Tue Nov 2, 1999	3:00 - 6:00 PM	2238	26.5%
Wed Oct 28, 1998	3:00 - 6:00 PM	2515	8.3%
Tue May 6, 1997	3:00 - 7:00 PM	3788	11.1%
Thu Oct 10, 1996	3:00 - 7:00 PM	4098	6.0%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

### Southbound - A.M.

Whipple Road to Mission Boulevard

Typical data for 2007 (5)

PF	ΔΚ	<b>PFR</b>		(4)
	$\neg$	1 – 11	w	

#### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	68	7	_	19	2
Buses	11	13		2	3
Carpools <sup>(1)</sup>	2325	174		903	57
Vanpools	18	1		8	0
Hybrid/Single Occ. (2)	218	12979	_	124	4204
Violators	96	_	_	57	_
TOTAL	2736	13174		1113	4266
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	68	7	_	19	2
Buses	385	455	_	70	105
Carpools (1)	4794	365	_	1848	122
Vanpools	180	10		80	0
Hybrid/Single Occ. (2)	218	12979	_	124	4204
Violators	96	_	_	57	_
TOTAL	5741	13816		2198	4433
RATES					
HOV Lane occupancy rate	2.1	persons/veh		2.0	persons/veh
Mixed Flow occupancy rate	1.0	persons/veh		1.0	persons/veh
Overall occupancy (incl. buses)	1.2	persons/veh	_	1.2	persons/veh
Violation rate (HOV Lane)	3.5	%	_	5.1	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 11/14/07 at Mowry I/C.

### Southbound - P.M.

Whipple Road to Mission Boulevard

Typical data for 2007 (5)

### PEAK PERIOD (4)

#### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	44	21	_	12	9
Buses	7	15	_	1	1
Carpools (1)	2358	485	_	788	163
Vanpools	17	22	_	5	3
Hybrid/Single Occ. (2)	88	11835	_	35	4065
Violators	53	_		8	_
TOTAL	2567	12378		849	4241
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	44	21	_	12	9
Buses	245	525		35	35
Carpools (1)	4892	1054	_	1641	355
Vanpools	170	220	_	50	30
Hybrid/Single Occ. (2)	88	11835	_	35	4065
Violators	53			8	
TOTAL	5492	13655		1781	4494
RATES			. =		
HOV Lane occupancy rate	2.1	persons/veh		2.1	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.2	persons/veh
Violation rate (HOV Lane)	2.1	%	_	0.9	%

**NOTES:** (1) Two or more persons per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 05/16/07 at Mowry I/C.

### Northbound - A.M.

Mission Boulevard to Whipple Road

Typical data for 2007 (5)

### PEAK PERIOD (4)

#### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	40	9		11	3
Buses	4	14		3	5
Carpools <sup>(1)</sup>	1093	268		369	104
Vanpools	3	20		2	9
Hybrid/Single Occ. (2)	67	9803		27	3554
Violators	11	_		2	_
TOTAL	1218	10114	_	414	3675
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	40	9	_	11	3
Buses	140	490	_	105	175
Carpools <sup>(1)</sup>	2249	568	_	758	220
Vanpools	30	200	_	20	90
Hybrid/Single Occ. (2)	67	9803	_	27	3554
Violators	11		_	2	_
TOTAL	2537	11070		923	4042
RATES					
HOV Lane occupancy rate	2.1	persons/veh		2.2	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.2	persons/veh	_	1.2	persons/veh
Violation rate (3) (HOV Lane)	0.9	%	_	0.5	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 P.M.
- (5) Observations conducted 04/12/07 at Mowry I/C.

### Northbound - P.M.

Mission Boulevard to Whipple Road

Typical data for 2007 (5)

PEAK PERIO	<b>DD</b> (4)
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#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

1.6 %

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	70	12	_	35	1
Buses	9	10		4	1
Carpools (1)	2403	782	_	921	234
Vanpools	14	3	_	6	1
Hybrid/Single Occ. (2)	144	13162	_	76	4890
Violators	62		_	17	_
TOTAL	2702	13969		1059	5127
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	70	12	_	35	1
Buses	315	350	_	140	35
Carpools <sup>(1)</sup>	5212	1634	_	1997	489
Vanpools	140	30	_	60	10
Hybrid/Single Occ. (2)	144	13162	_	76	4890
Violators	62			17	
TOTAL	5943	15188		2325	5425
RATES					
HOV Lane occupancy rate	2.2	persons/veh		2.2	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh	_	1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh		1.3	persons/veh

**NOTES:** (1) Two or more persons per vehicle.

2.3 %

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

Total no. of vehicles in HOV lane

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 10/18/07 at Mowry I/C.

Violation rate

(HOV Lane)

Whipple Road to Mission Boulevard

# **Violation History**

#### Southbound

ΔΜ	PEAK
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DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Wed Nov 14, 2007	6:00 - 9:00 AM	2736	3.5%
Tue Dec 5, 2006	6:00 - 9:00 AM	2509	12.0%
Wed Oct 26, 2005	6:00 - 9:00 AM	1948	3.0%
Tue Nov 9, 2004	6:00 - 9:00 AM	2355	2.7%
Tue Jun 3, 2003	6:00 - 9:00 AM	2418	3.5%
Tue Sep 24, 2002	6:00 - 9:00 AM	2525	3.2%
Tue Mar 27, 2001	6:00 - 9:00 AM	3423	4.8%
Tue Mar 28, 2000	6:00 - 9:00 AM	2438	6.2%
Wed May 19, 1999	6:00 - 9:00 AM	2118	3.7%

#### P.M. PEAK

Wed May 16, 2007	3:00 - 6:00 PM	2567	2.1%
Wed Nov 8, 2006	3:00 - 6:00 PM	2669	0.7%
Wed Nov 9, 2005	3:00 - 6:00 PM	2539	1.7%
Tue Dec 14, 2004	3:00 - 6:00 PM	2639	6.8%
Wed May 7, 2003	3:00 - 6:00 PM	2227	4.2%
Tue May 7, 2002	3:00 - 6:00 PM	2114	5.8%
Wed Oct 17, 2001	3:00 - 6:00 PM	2157	3.8%
Thu Nov 9, 2000	3:00 - 6:00 PM	2060	5.9%
Tue Mar 9, 1999	3:00 - 6:00 PM	1966	20.7%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

Mission Boulevard to Whipple Road

# **Violation History**

#### **Northbound**

**VIOLATION** 

#### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Thu Apr 12, 2007	6:00 - 9:00 AM	1218	0.9%
Wed Nov 15, 2006	6:00 - 9:00 AM	1383	0.7%
Thu Apr 14, 2005	6:00 - 9:00 AM	1327	4.7%
Thu Nov 4, 2004	6:00 - 9:00 AM	1160	3.8%
Wed Oct 15, 2003	6:00 - 9:00 AM	1413	2.5%
Tue Apr 16, 2002	6:00 - 9:00 AM	925	2.9%
Thu Nov 1, 2001	6:00 - 9:00 AM	856	9.7%
Wed Mar 29, 2000	6:00 - 9:00 AM	956	5.6%
Wed Mar 10, 1999	6:00 - 9:00 AM	833	13.2%

TOTAL HOVL

PERIOD

#### P.M. PEAK

Thu Oct 18, 2007	3:00 - 6:00 PM	2702	2.3%
Tue Nov 7, 2006	3:00 - 6:00 PM	2054	1.0%
Tue Oct 18, 2005	3:00 - 6:00 PM	2695	3.7%
Tue Nov 23, 2004	3:00 - 6:00 PM	2150	0.2%
Wed Oct 15, 2003	3:00 - 6:00 PM	2366	3.1%
Wed May 15, 2002	3:00 - 6:00 PM	2663	6.0%
Thu Jun 7, 2001	3:00 - 6:00 PM	2755	3.9%
Wed Nov 1, 2000	3:00 - 6:00 PM	3263	3.6%
Thu Mar 18, 1999	3:00 - 6:00 PM	2657	4.6%
	·		

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

### Northbound - A.M.

16th Street to SFOBB Toll Plaza

Typical data for 2007 (5)

### PEAK PERIOD (4)

7:00 - 10:00 AM

**PEAK HOUR** 7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	88	0	30	9
Buses	60	6	13	5
Carpools <sup>(1)</sup>	1324	0	556	0
Hybrid	133	0	33	10
Vanpools	33	0	3	6
1 and 2 Occ. (2)	_	2933		1112
Violators	237	_	68	_
TOTAL	1875	2939	703	1142

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	88	0	34	2
Buses	2100	210	455	175
Carpools (1)	3719	0	1591	0
Hybrid	133	0	33	10
Vanpools	330	0	30	60
1 and 2 Occ. (2)	_	3159	_	1264
Violators	357	_	112	
TOTAL	6727	3369	2255	1511

#### **RATES**

HOV Lane occupancy rate	3.6 persons/veh	3.2 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.3 persons/veh
Overall occupancy (incl. buses)	2.1 persons/veh	2.0 persons/veh
Violation rate <sup>(3)</sup> - (HOV Lane)	12.6 %	9.7 %

**NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 10:00 A.M.
- (5) Observations conducted 3/15/07 north of 7th Street Interchange.

## **ALAMEDA-880**

16th Street to SFOBB Toll Plaza

## **Violation History**

### **Northbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Thu Mar 15, 2007	7:00 - 10:00 AM	1875	12.6%
Wed May 10, 2006	6:00 - 10:00 AM	1763	8.5%
Wed Mar 16, 2005	6:00 - 10:00 AM	1483	10.5%
Thu Oct 28, 2004	7:00 - 10:00 AM	1647	15.5%
Wed May 21, 2003	5:00 - 10:00 AM	1451	5.6%
Wed Apr 17, 2002	6:00 - 10:00 AM	1613	4.8%
Thu Mar 22, 2001	6:00 - 10:00 AM	2402	15.5%
Wed Sep 27, 2000	7:00 - 10:00 AM	2983	16.4%
Tue May 18, 1999	6:00 - 10:00 AM	3471	3.1%
Thu Sep 10, 1998	6:00 - 10:00 AM	1937	11.7%

**PERIOD** 

**TOTAL HOVL** 

### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Tue May 20, 2003	3:00 - 7:00 PM	457	3.5%
Wed Apr 17, 2002	3:00 - 7:00 PM	486	6.8%
Thu Oct 11, 2001	3:00 - 7:00 PM	397	14.6%
Wed Oct 18, 2000	3:00 - 7:00 PM	513	43.3%
Thu Sep 30, 1999	3:00 - 7:00 PM	587	16.5%
Thu Sep 10, 1998	3:00 - 7:00 PM	343	14.9%

- **NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 off-peak direction

### Westbound - A.M.

Loveridge Road to Port Chicago Highway

Typical data for 2007 (5)

PE	EAK	PER	OD	(4)	
	0.00	0.00 4			

### **PEAK HOUR**

6:00 - 9:00 AM

6:00 - 7:00 AM

9.6 %

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	63	5		24	1
Buses	3	20	-	1	10
Carpools <sup>(1)</sup>	2850	497		1062	76
Vanpools	15	13		11	10
Hybrid/Single Occ. (2)	58	13963	_	24	5328
Violators	257			119	_
TOTAL	3246	14498	-	1241	5425
PERSONS	HOV Lane	Mixed Flow Lanes	-	HOV Lane	Mixed Flow Lanes
Motorcycles	63	5	_	24	1
Buses	105	700	_	35	350
Carpools <sup>(1)</sup>	5900	1072	_	2192	169
Vanpools	150	130	_	110	100
Hybrid/Single Occ. (2)	58	13963	_	24	5328
Violators	257			119	
TOTAL	6533	15870		2504	5948
RATES			-		
HOV Lane occupancy rate	2.0	persons/veh		2.0	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	-	1.3	persons/veh

**NOTES:** (1) Two or more persons per vehicle.

7.9 %

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

Total no. of vehicles in HOV lane

- (4) HOV lane in operation from 6:00 to 9:00 A.M.
- (5) Observations conducted 04/19/07 at Bailey Road I/C.

Violation rate

(HOV Lane)

### Eastbound - P.M.

Port Chicago Highway to Railroad Avenue

Typical data for 2007 (5)

	1/	DE	$\Box$	$\sim$		(4)
PEA	n		ΚI	u	IJ	` '

### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES H	OV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	144	32		70	15
Buses	8	25		3	8
Carpools (1)	2666	1547		967	497
Vanpools	17	48		5	11
Hybrid/Single Occ. (2)	55	15516		25	5718
Violators	74	_		21	_
TOTAL	2964	17168		1091	6249
PERSONS H	OV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	144	32	_	70	15
Buses	280	875		105	280
Carpools (1)	5494	3357		1989	1073
Vanpools	170	480		50	110
Hybrid/Single Occ. (2)	55	15516		25	5718
Violators	74		_	21	
TOTAL	6217	20260		2260	7196
RATES			_		
HOV Lane occupancy rate	2.1	persons/veh	_	2.1	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh		1.2	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh		1.3	persons/veh
Violation rate (3) (HOV Lane)	2.5	%	_	1.9	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 05/30/07 at San Marcos I/C.

## **Violation History**

Loveridge Road to Port Chicago Highway

### Westbound

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Thu Apr 19, 2007	6:00 - 9:00 AM	3246	7.9%
Thu Sep 7, 2006	6:00 - 9:00 AM	2437	3.0%
Tue Jun 7, 2005	6:00 - 9:00 AM	2634	3.3%
Thu Oct 21, 2004	6:00 - 9:00 AM	2436	2.0%
Thu Oct 16, 2003	6:00 - 9:00 AM	2657	3.6%
Thu May 23, 2002	6:00 - 9:00 AM	2225	4.5%
Wed Sep 19, 2001	6:00 - 9:00 AM	1174	7.0%
Wed May 10, 2000	6:00 - 9:00 AM	861	5.6%

**NOTES:** (a) Morning period of operation from 6:00 to 9:00 AM.

## **Violation History**

Port Chicago Highway to Railroad Ave.

### **Eastbound**

### P.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Tue Apr 17, 2007	3:00 - 6:00 PM	2964	2.5%
Wed Sep 6, 2006	3:00 - 6:00 PM	2942	1.7%
Thu Oct 20, 2005	3:00 - 6:00 PM	2524	3.8%
Tue Dec 7, 2004	3:00 - 6:00 PM	2289	1.7%
Wed May 14, 2003	3:00 - 6:00 PM	2292	1.9%
Tue Mar 19, 2002	3:00 - 6:00 PM	2248	4.4%
Tue Oct 30, 2001	3:00 - 6:00 PM	2011	4.0%

**NOTES:** (a) Evening period of operation from 3:00 to 7:00 PM.

### Westbound - A.M.

Route 4 to Alameda County Line

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

7:00 - 10:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	77	20		27	18
Buses	80	24	_	36	5
Carpools (1)	2056	203	_	1182	58
Hybrid	257	14	_	116	4
Vanpools	21	1	_	14	1
1 and 2 Occ. (2)	_	12387	_	_	4378
Violators	296		_	101	
TOTAL	2787	12649		1476	4464

PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	77	20	_	27	18
Buses	2800	840		1260	175
Carpools (1)	9367	1893	_	3516	510
	257	14	_	116	4
Vanpools	210	10		140	10
1 and 2 Occ. (2)	_	21092		_	5402
Violators	587	_		151	_
TOTAL	13298	23869	-	5210	6119

#### **RATES**

•		
HOV Lane occupancy rate	4.8 persons/veh	3.5 persons/veh
Mixed Flow occupancy rate	1.9 persons/veh	1.4 persons/veh
Overall occupancy (incl. buses)	2.4 persons/veh	1.9 persons/veh
Violation rate <sup>(3)</sup> - (HOV Lane)	10.6 %	6.8 %

**NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 10:00 A.M.
- (5) Observations conducted 10/18/07 east of Hilltop Drive Interchange.

### Eastbound - P.M.

Alameda County Line to Route 4

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

3:00 - 7:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	 HOV Lane	Mixed Flow Lanes
Motorcycles	165	53	39	13
Buses	117	30	 33	13
Carpools (1)	2904	592	 685	136
Hybrid	311	29	 72	6
Vanpools	83	15	 35	4
1 and 2 Occ. (2)	_	20831	 _	5508
Violators	73		13	
TOTAL	3653	21550	877	5680

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	165	53	39	13
Buses	4095	1050	1155	455
Carpools (1)	8285	1680	1971	380
Hybrid	311	29	72	6
Vanpools	830	150	350	40
1 and 2 Occ. (2)	_	23669		6169
Violators	98	_	16	_
TOTAL	13784	26631	3603	7063

#### **RATES**

•		
HOV Lane occupancy rate	3.8 persons/veh	4.1 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh	1.2 persons/veh
Overall occupancy (incl. buses)	1.6 persons/veh	1.6 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	2.0 %	1.5 %

**NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 4/24/07 east of Hilltop Drive Interchange.

### **Violation History**

Route 4 to Alameda County Line

### Westbound

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Thu Oct 18, 2007	7:00 - 10:00 AM	2787	10.6%
Wed May 24, 2006	6:00 - 10:00 AM	4095	10.9%
Thu Nov 10, 2005	7:00 - 10:00 AM	2635	12.5%
Tue Nov 9, 2004	7:00 - 10:00 AM	2507	9.2%
Fri May 9, 2003	6:00 - 10:00 AM	4509	27.2%
Tue Apr 16, 2002	7:00 - 10:00 AM	2656	6.4%
Tue Mar 27, 2001	6:00 - 10:00 AM	3640	8.7%
Tue Oct 3, 2000	7:00 - 10:00 AM	2643	9.5%
Tue Nov 9, 1999	7:00 - 10:00 AM	2186	11.1%
Tue Oct 6, 1998	7:00 - 10:00 AM	1743	10.0%

**PERIOD** 

**TOTAL HOVL** 

### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Tue May 7, 2002	3:00 - 7:00 PM	1401	25.7%
Thu Oct 4, 2001	3:00 - 7:00 PM	1432	24.2%
Thu Apr 13, 2000	3:00 - 7:00 PM	1167	37.3%
Wed Apr 21, 1999	3:00 - 7:00 PM	1068	18.5%
Tue Oct 6, 1998	3:00 - 7:00 PM	802	31.9%

- **NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## **Violation History**

Alameda County Line to Route 4

### **Eastbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Tue Apr 23, 2002	6:00 - 10:00 AM	632	19.8%
Tue May 15, 2001	6:00 - 10:00 AM	553	18.3%
Thu Dec 14, 2000	7:00 - 10:00 AM	483	26.3%
Wed Apr 7, 1999	7:00 - 10:00 AM	498	26.9%
Thu Oct 1, 1998	6:00 - 10:00 AM	386	43.0%

**PERIOD** 

**TOTAL HOVL** 

### P.M. PEAK

Tue Apr 24, 2007	3:00 - 7:00 PM	3653	2.0%
Tue May 2, 2006	3:00 - 7:00 PM	4580	6.7%
Tue Apr 19, 2005	3:00 - 7:00 PM	3897	6.4%
Thu Oct 21, 2004	3:00 - 6:00 PM	3214	9.3%
Wed May 28, 2003	3:00 - 7:00 PM	4256	11.5%
Tue Apr 16, 2002	3:00 - 7:00 PM	3921	9.0%
Thu Sep 20, 2001	3:00 - 7:00 PM	4649	4.4%
Tue Sep 26, 2000	3:00 - 7:00 PM	3780	18.0%
Tue Apr 13, 1999	3:00 - 7:00 PM	2956	9.5%
Thu Oct 22, 1998	3:00 - 6:00 PM	2422	17.8%

- **NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 off-peak direction

### Northbound - A.M.

N/O Marina Vista I/C to Benicia Bridge Toll Plaza

Typical data for 2007 (5)

	PEAK PERIOD (4) 6:00 - 9:00 AM				HOUR 9:00 AM
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	58	7	_	13	3
Buses	8	4		5	1
Carpools (1)	255	26		67	6
Vanpools	7	0		1	0
Two Occ. (2)	11	690		7	237
Hybrid / Single Occ. (2)	6	6106	_	3	2095
Violators	12		_	7	
TOTAL	345	6833		96	2342
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	58	7	_	13	3
Buses	280	140		175	35
Carpools (1)	765	78	_	201	18
Vanpools	70	0		10	0
Two Occ.	22	1380		14	474
Hybrid / Single Occ. (2)	6	6106	_	3	2095
Violators	23			15	_
TOTAL	1201	7711	_	416	2625
RATES			_		
HOV Lane occupancy rate	3.5	persons/veh		4.3	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.2	persons/veh	_	1.2	persons/veh
Violation rate (3) - (HOV Lane)	3.5	%	_	7.3	%

**NOTES:** 1) Three or more persons per vehicle.

- (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 10:00 A.M.
- (5) Observations conducted 09/6/07 at Benicia Bridge Toll Plaza.

### Northbound - P.M.

N/O Marina Vista I/C to Benicia Bridge Toll Plaza

Typical data for 2007 (5)

	<b>PEAK PERIOD</b> (4) 3:00 - 6:00 PM			<b>PEAK</b> 4:00 - 5	
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	113	13		40	6
Buses _	4	5		4	1
Carpools <sup>(1)</sup> _	639	46	_	224	15
Vanpools _	28	0	_	11	0
Two Occ. (2)	59	1156		22	430
Hybrid / Single Occ. (2)	27	10145		4	3549
Violators	68	_		26	_
TOTAL	870	11365		305	4001
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	113	13	•	40	6
Buses	140	175	-	140	35
Carpools <sup>(1)</sup>	1917	138	_	672	45
Vanpools	280	0	_	110	0
Two Occ.	118	2312		44	860
Hybrid / Single Occ. (2)	27	10145	=	4	3549
Violators	127	_		45	_
TOTAL	2595	12783		1010	4495
RATES					
HOV Lane occupancy rate	3.0	persons/veh	_	3.3	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.3	persons/veh
Violation rate (3) - (HOV Lane)	7.8	%	_	8.5	%

**NOTES:** 1) Three or more persons per vehicle.

- (2) Hybrid HOV lane only/Single and two Occupancy mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 09/5/07 at Benicia Bridge Toll Plaza.

## **Violation History**

N/O Marina Vista I/C to Benicia Bridge Toll Plaza

### **Northbound**

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Sep 6, 2007	6:00 - 9:00 AM	345	3.5%
P.M. PEAK	Wed Sep 5, 2007	3:00 - 6:00 PM	870	7.8%

**NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

### Southbound - A.M.

Marina Vista I/C to N/O North Main St.

Typical data for 2007 (5)

DF	ΔK	PERIOD	(4)
$\Gamma$	AN	FENIOL	,

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	69	14	_	33	2
Buses	5	74		2	14
Carpools (1)	2685	864	_	1046	455
Vanpools	27	4	_	8	2
Hybrid/Single Occ. (2)	128	21603		59	7007
Violators	45	_	_	7	_
TOTAL	2959	22559		1155	7480
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	69	14	_	33	2
Buses	175	2590	_	70	490
Carpools (1)	5505	1924	_	2164	1010
Vanpools	270	40	_	80	20
Hybrid/Single Occ. (2)	128	21603	_	59	7007
Violators	45		_	7	_
TOTAL	6192	26171		2413	8529
RATES					
HOV Lane occupancy rate	2.1	persons/veh	_	2.1	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh	_	1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.3	persons/veh
Violation rate (3) (HOV Lane)	1.5	%	_	0.6	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 6:00 to 9:00 A.M.
- (5) Observations conducted 03/28/07 at Truck Scale.

### Southbound - P.M.

Marina Vista I/C to N/O North Main St.

Typical data for 2007 (5)

PF	ΔK	PFR		(4)
ГС	H	$\Gamma \sqcup \Gamma$	IUU	

### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	24	56		7	18
Buses	7	24		4	11
Carpools <sup>(1)</sup>	1285	2031	_	419	700
Vanpools	5	12	_	3	6
Hybrid/Single Occ. (2)	36	16114		11	5591
Violators	21			8	_
TOTAL	1378	18237		452	6326
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	24	56		7	18
Buses	245	840		140	385
Carpools <sup>(1)</sup>	2814	4291		892	1473
Vanpools	50	120	_	30	60
Hybrid/Single Occ. (2)	36	16114		11	5591
Violators	21			8	_
TOTAL	3190	21421		1088	7527
RATES					
HOV Lane occupancy rate	2.3	persons/veh		2.4	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh		1.2	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh		1.3	persons/veh
Violation rate (HOV Lane)	1.5	%	_	1.8	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 03/28/07 at Truck Scale.

### Northbound - A.M.

Route 242 to Marina Vista I/C

Typical data for 2007 (5)

PF	AK	<b>PER</b>	IOD	(4)
ГЬ	$\Delta$		IUU	

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	42	31	_	19	12
Buses	0	5		0	1
Carpools <sup>(1)</sup>	375	547		146	216
Vanpools	3	0	_	1	0
Hybrid/Single Occ. (2)	31	7119	_	13	2764
Violators	28	_	_	14	
TOTAL	479	7702		193	2993
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	42	31	_	19	12
Buses	0	175	_	0	35
Carpools (1)	800	1174	_	317	479
Vanpools	30	0	_	10	0
Hybrid/Single Occ. (2)	31	7119	_	13	2764
Violators	28	_	_	14	
TOTAL	931	8499		373	3290
RATES					
HOV Lane occupancy rate	1.9	persons/veh	_	1.9	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.2	persons/veh		1.1	persons/veh
Violation rate (HOV Lane)	5.8	%	_	7.3	%

**NOTES:** (1) Two or more persons per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 6:00\ to\ 9:00\ A.M.$
- (5) Observations conducted 09/05/07 at Pacheco Boulevard.

### Northbound - P.M.

Route 242 to Marina Vista I/C

Typical data for 2007 (5)

	1/	DE	$\Box$	$\sim$		(4)
PEA	n		ΚI	u	IJ	` '

### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	H:	OV Lane	Mixed Flow Lanes
Motorcycles	49	9		15	4
Buses	5	15	. <u> </u>	2	9
Carpools <sup>(1)</sup>	1372	749		490	216
Vanpools	25	18		7	3
Hybrid/Single Occ. (2)	66	9906		22	3480
Violators	119			24	_
TOTAL	1636	10697		560	3712
PERSONS	HOV Lane	Mixed Flow Lanes	H:	OV Lane	Mixed Flow Lanes
Motorcycles	49	9		15	4
Buses	175	525		70	315
Carpools <sup>(1)</sup>	2897	1586	. <u>-</u>	1036	462
Vanpools	250	180	<u> </u>	70	30
Hybrid/Single Occ. (2)	66	9906		22	3480
Violators	119			24	_
TOTAL	3556	12206		1237	4291
RATES					
HOV Lane occupancy rate	2.2	persons/veh		2.2	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.2	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh		1.3	persons/veh
Violation rate (3) (4) (HOV Lane)	7.3	%		4.3	%

**NOTES:** (1) Two or more persons per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 10/30/07 at Pacheco Boulevard.

## **Violation History**

Marina Vista I/C. to N/O North Main St

### Southtbound

VIOLATION

A.	M.	PF	ΔK

DATE	MONITORED	VOLUME	RATE
Wed Mar 28, 2007	6:00 - 9:00 AM	2959	1.5%
Wed Oct 11, 2006	6:00 - 9:00 AM	2727	1.0%
Tue May 3, 2005	6:00 - 9:00 AM	2387	0.9%
Wed Oct 6, 2004	6:00 - 9:00 AM	2068	2.0%

TOTAL HOVE

PERIOD

### P.M. PEAK

Wed Mar 28, 2007	3:00 - 6:00 PM	1378	1.5%
Wed Oct 25, 2006	3:00 - 6:00 PM	1270	1.4%
Tue Sep 27, 2005	3:00 - 6:00 PM	1095	2.1%
Tue Oct 5, 2004	3:00 - 6:00 PM	1083	4.2%

**NOTES:** (a) Morning period of operation from 6:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

## **Violation History**

Route 242 to Marina Vista I/C.

### Northtbound

### A.M. PEAK

DATE	MONITORED	VOLUME	VIOLATION RATE
Wed Sep 5, 2007	6:00 - 9:00 AM	479	5.8%
Wed Apr 26, 2006	6:00 - 9:00 AM	511	13.7%
Thu Sep 22, 2005	6:00 - 9:00 AM	560	5.5%

### P.M. PEAK

Tue Oct 30, 2007	3:00 - 6:00 PM	1636	7.3%
Thu Oct 26, 2006	3:00 - 6:00 PM	1732	2.3%
Thu Oct 6, 2005	3:00 - 6:00 PM	1910	8.8%

**NOTES:** (a) Morning period of operation from 6:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

### Southbound - A.M.

Livorna Road to Alcosta Boulevard

Typical data for 2007 (5)

PF	ΔK	<b>PFR</b>	IOD	(4)
_	$\neg$ ı\			

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	70	9		36	3
Buses	23	20	_	12	10
Carpools (1)	2471	360	_	915	153
Vanpools	26	2	_	6	0
Hybrid/Single Occ. (2)	185	14261	_	96	5020
Violators	63			13	
TOTAL	2838	14652		1078	5186
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	70	9	_	36	3
Buses	805	700	_	420	350
Carpools <sup>(1)</sup>	5076	784	_	1891	324
Vanpools	260	20	_	60	0
Hybrid/Single Occ. (2)	185	14261	_	96	5020
Violators	63	_	_	13	_
TOTAL	6459	15774		2516	5697
RATES					
HOV Lane occupancy rate	2.3	persons/veh		2.3	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh	_	1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh		1.3	persons/veh
Violation rate (HOV Lane)	2.2	%	_	1.2	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 6:00\ to\ 9:00\ A.M.$
- (5) Observations conducted 10/04/07 at Stone Valley Road.

### Southbound - P.M.

Livorna Road to Alcosta Boulevard

Typical data for 2007 (5)

PF	AK	<b>PER</b>	IOD	(4)
ГЬ	$\Delta$		IUU	

### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES		HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
	Motorcycles	79	7		35	5
	Buses	17	20		5	1
	Carpools (1)	2561	1103	_	873	242
	Vanpools	12	6		3	0
	Single Occ. (2)	121	14417		45	5127
	Violators	99	_	_	50	_
	TOTAL	2889	15553		1011	5375
PERSONS		HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
	Motorcycles	79	7	_	35	5
	Buses	595	700	_	175	35
	Carpools (1)	5384	2395	_	1833	523
	Vanpools	120	60		30	0
	Single Occ. (2)	121	14417	_	45	5127
	Violators	99	_		50	_
	TOTAL	6398	17579		2168	5690
RATES						
00	HOV Lane ccupancy rate	2.2	persons/veh		2.1	persons/veh
00	Mixed Flow ccupancy rate	1.1	persons/veh	_	1.1	persons/veh
Overa	all occupancy (incl. buses)	1.3	persons/veh	_	1.2	persons/veh
	Violation rate (3) (HOV Lane)	3.4	%	_	4.9	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 6:00 P.M.
- (5) Observations conducted 10/25/07 at Stone Valley Road.

## Northbound - A.M.

Alcosta Boulevard to Livorna Road

Typical data for 2007 (5)

PF	ΔK	<b>PFR</b>	IOD	(4)
_	$\neg$ ı\			

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	27	6		12	2
Buses	29	8	_	9	3
Carpools <sup>(1)</sup>	1575	227	_	622	95
Vanpools	8	3	_	2	0
Hybrid/Single Occ. (2)	136	10165		58	4119
Violators	72	_		26	_
TOTAL	1847	10409	_	729	4219
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	27	6		12	2
Buses	1015	280		315	105
Carpools <sup>(1)</sup>	3509	479	_	1435	204
Vanpools	80	30	_	20	0
Hybrid/Single Occ. (2)	136	10165		58	4119
Violators	72	_		26	_
TOTAL	4839	10960	_	1866	4430
RATES			_		
HOV Lane occupancy rate	2.6	persons/veh		2.6	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.3	persons/veh
Violation rate (HOV Lane)	3.9	%	-	3.6	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- $(4) \ \ HOV\ lane\ in\ operation\ from\ 6:00\ to\ 9:00\ A.M.$
- (5) Observations conducted 03/08/07 at Stone Valley Road.

### Northbound - P.M.

Alcosta Boulevard to Livorna Road

Typical data for 2007 (5)

PF	=Δ	K	PI	FR	IO	D	(4)
					$\cdot \cdot \cdot$	_	

### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	95	15	_	36	3
Buses	28	20	_	8	15
Carpools <sup>(1)</sup>	3333	577	_	1207	147
Vanpools	41	4	_	21	0
Hybrid/Single Occ. (2)	179	13702	_	61	4751
Violators	83	_		11	_
TOTAL	3759	14318		1344	4916
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	95	15	_	36	3
Buses	980	700	_	280	525
Carpools <sup>(1)</sup>	6941	1265	_	2498	319
Vanpools	410	40	_	210	0
Hybrid/Single Occ. (2)	179	13702	_	61	4751
Violators	83	_	_	11	_
TOTAL	8688	15722		3096	5598
RATES			. <u>-</u>		
HOV Lane occupancy rate	2.3	persons/veh		2.3	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh		1.1	persons/veh
Overall occupancy (incl. buses)	1.4	persons/veh	_	1.4	persons/veh
Violation rate (3) - (4) (HOV Lane)	2.2	%	_	0.8	%

- **NOTES:** (1) Two or more persons per vehicle.
  - (2) Mixed flow lanes only.
  - (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 6:00 P.M.
- (5) Observations conducted 09/11/07 at Stone Valley Road.

## **Violation History**

Livorna Road to Alcosta Boulevard

### **Southbound**

**VIOLATION** 

A.M.	<b>PEAK</b>
/\v	. –/\.\

DATE	MONITORED	VOLUME	RATE
Thu Oct 4, 2007	6:00 - 9:00 AM	2838	2.2%
Thu Jun 8, 2006	6:00 - 9:00 AM	3047	7.6%
Wed Nov 16, 2005	6:00 - 9:00 AM	2793	4.4%
Tue Oct 5, 2004	6:00 - 9:00 AM	2118	4.5%
Thu Apr 3, 2003	6:00 - 9:00 AM	2114	0.6%
Thu Jun 13, 2002	6:00 - 9:00 AM	2480	1.7%
Thu Mar 15, 2001	6:00 - 9:00 AM	2609	5.3%
Thu Apr 6, 2000	6:00 - 9:00 AM	2258	2.8%
Wed Sep 29, 1999	6:00 - 9:00 AM	1974	3.1%
Tues Mar 10, 1998	6:00 - 9:00 AM	1545	9.0%
Wed Oct 29, 1997	6:00 - 9:00 AM	1791	3.9%
Thu Oct 10, 1996	6:00 - 9:00 AM	1359	2.6%

PERIOD

**TOTAL HOVL** 

### P.M. PEAK

Thu Oct 25, 2007	3:00 - 6:00 PM	2889	3.4%
Wed Sep 20, 2006	3:00 - 6:00 PM	3143	1.3%
Tue Nov 15, 2005	3:00 - 6:00 PM	2640	3.0%
Thu Oct 28, 2004	3:00 - 6:00 PM	2527	2.6%
Tue Apr 8, 2003	3:00 - 6:00 PM	2109	2.4%
Wed Mar 13, 2002	3:00 - 6:00 PM	2009	7.8%
Wed May 9, 2001	3:00 - 6:00 PM	1831	8.5%
Tue Dec 12, 2000	3:00 - 6:00 PM	1337	4.3%
Wed Sep 29, 1999	3:00 - 6:00 PM	1604	7.2%
Tue Sep 22, 1998	3:00 - 6:00 PM	2004	8.4%
Thu Apr 17, 1997	3:00 - 6:00 PM	1344	2.0%
Wed Oct 9, 1996	3:00 - 6:00 PM	1182	4.1%

**NOTES:** (a) Morning period of operation from 6:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 6:00 PM.

## **Violation History**

Alcosta Boulevard to Livorna Road

### **Northbound**

**VIOLATION** 

$A_{\cdot}M_{\cdot}$	PEAK
,v	/ \.\

DATE	MONITORED	VOLUME	RATE
Thu Mar 8, 2007	6:00 - 9:00 AM	1847	3.9%
Wed Sep 13, 2006	6:00 - 9:00 AM	2194	2.1%
Wed Apr 27, 2005	6:00 - 9:00 AM	1891	3.5%
Thu Oct 7, 2004	6:00 - 9:00 AM	1899	3.0%
Tue Oct 21, 2003	6:00 - 9:00 AM	1920	5.0%
Thu Apr 25, 2002	6:00 - 9:00 AM	1746	6.9%
Tue Sep 25, 2001	6:00 - 9:00 AM	1681	3.0%
Thu Nov 2, 2000	6:00 - 9:00 AM	1263	7.0%
Tue Sep 28, 1999	6:00 - 9:00 AM	621	7.1%
Thu Nov 5, 1998	6:00 - 9:00 AM	1213	4.6%
Tue Oct 28, 1997	6:00 - 9:00 AM	1139	4.1%
Wed Oct 9, 1996	6:00 - 9:00 AM	958	6.6%

PERIOD

**TOTAL HOVL** 

### P.M. PEAK

Tue Sep 11, 2007	3:00 - 6:00 PM	3759	2.2%
Wed Nov 29, 2006	3:00 - 6:00 PM	3757	0.9%
Tue Apr 26, 2005	3:00 - 6:00 PM	3727	3.2%
Thu Dec 2, 2004	3:00 - 6:00 PM	3842	2.4%
Tue Oct 21, 2003	3:00 - 6:00 PM	3677	3.4%
Wed Nov 20, 2002	3:00 - 6:00 PM	3989	4.5%
Tue May 8, 2001	3:00 - 6:00 PM	3742	5.0%
Wed Oct 4, 2000	3:00 - 6:00 PM	4165	3.6%
Tue Oct 26, 1999	3:00 - 6:00 PM	3224	4.9%
Tue Oct 6, 1998	3:00 - 6:00 PM	2819	3.1%
Wed Oct 15, 1997	3:00 - 6:00 PM	2755	4.9%
Thu Oct 3, 1996	3:00 - 6:00 PM	2523	6.1%

**NOTES:** (a) Morning period of operation from 6:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 6:00 PM.

### Southbound - A.M.

Anderson Drive to Richardson Bridge

Typical data for 2007 (5)

### **PEAK HOUR**

6:30 - 8:30 AM

7:30 - 8:30 AM

0.7 %

	6:30 - 8:30 AM		7:30 -	7:30 - 8:30 AM		
VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes		
Motorcycles	64	22	37	7		
Buses	50	42	28	20		
Carpools (1)	923	588	554	367		
Vanpools	10	4	7	0		
Hybrid/Single Occ. (2)	95	8235	65	4108		
Violators	17		5			
TOTAL	1159	8891	696	4502		
PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes		
Motorcycles	64	22	37	7		
Buses	1750	1470	980	700		
Carpools (1)	1930	1310	1161	820		
Vanpools	100	40	70	0		
Hybrid/Single Occ. (2)	95	8235	65	4108		
Violators	17		5	_		
TOTAL	3956	11077	2318	5635		
RATES						
HOV Lane occupancy rate	3.4	persons/veh	3.4	persons/veh		
Mixed Flow occupancy rate	1.2 persons/veh		1.3	persons/veh		
Overall occupancy	1.5	persons/veh	1.5	persons/veh		

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- (2) Hybrid HOV Lane only/Single Occupancy mixed flow lane only.
- (3) Violation rate = no. of violators in HOV lane x 100%Total no. of vehicles in HOV lane
  - HOV lane in operation from 6:30 to 8:30 A.M.

1.5 %

(5) Observations conducted 09/19/07 at Route 131, East Blithdale Ave. I/C.

(incl. buses)
Violation rate (3)

(HOV Lane)

(4)

## Northbound - P.M.

Richardson Bridge to Nellen Avenue UC

Typical data for 2007 (5)

	<b>PEAK PERIOD</b> (4) 4:30 - 7:00 PM			<b>PEAK</b> 5:30 - 6	
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	94	8	_	43	7
Buses	76	50	_	30	19
Carpools (1)	2169	647		813	248
Vanpools	11	5		2	1
Hybrid/Single Occ. (2)	165	11531		85	5078
Violators	30	_		2	_
TOTAL	2545	12241	-	975	5353
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	94	8		43	7
Buses	2660	1750	_	1050	665
Carpools (1)	4454	1355	_	1672	524
Vanpools	110	50	_	20	10
Hybrid/Single Occ. (2)	165	11531	_	85	5078
Violators	30			2	_
TOTAL	7513	14694	_	2872	6284
RATES			_		
HOV Lane occupancy rate	3.0	persons/veh	_	2.9	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh		1.2	persons/veh
Overall occupancy (incl. buses)	1.5	persons/veh		1.4	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	1.2 %		-	0.2	%
NOTES: (1) (2) (3)	Two or more occupants per vehicle.  Hybrid HOV Lane only/Single Occupancy mixed flow lane only.  Violation rate = no. of violators in HOV lane x 100%  Total no. of vehicles in HOV lane  HOV lane in operation from 4:30 to 7:00 P.M.				
(5)	_	ranon from 4.30 to iducted 10/03/07 at			e Ave. I/C.

## **Violation History**

Andersen Drive to Richardson Bay Bridge

### **Southbound**

### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Wed Sep 19, 2007	6:30 - 8:30 AM	1159	1.5%
Thu Apr 13, 2006	6:30 - 8:30 AM	1049	1.4%
Thu Mar 3, 2005	6:30 - 8:30 AM	1099	3.0%
Thu Nov 4, 2004	6:30 - 8:30 AM	1015	4.4%
Tue Apr 8, 2003	6:30 - 8:30 AM	1118	3.4%
Wed Mar 20, 2002	6:30 - 8:30 AM	1591	1.9%
Wed Mar 28, 2001	6:30 - 8:30 AM	1495	2.3%
Thu Mar 23, 2000	6:30 - 8:30 AM	1538	2.8%
Wed Mar 17, 1999	6:30 - 8:30 AM	1394	2.3%
Tue Mar 3, 1998	6:30 - 8:30 AM	1106	1.6%
Tue Mar 11, 1997	6:30 - 8:30 AM	1367	2.4%
Thu Oct 17, 1996	6:30 - 8:30 AM	1446	1.2%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988

(b) Morning period of operation from 6:30 to 8:30 AM.

## **Violation History**

Richardson Bay Bridge to Nellen avenue UC

### **Northbound**

### P.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Wed Oct 3, 2007	4:30 - 7:00 PM	2545	1.2%
Thu Apr 6, 2006	4:30 - 7:00 PM	1781	1.4%
Thu Sep 29, 2005	4:30 - 7:00 PM	1953	1.6%
Wed Oct 13, 2004	4:30 - 7:00 PM	1529	1.9%
Wed Apr 16, 2003	4:30 - 7:00 PM	1370	2.4%
Tue Sep 17, 2002	4:30 - 7:00 PM	1365	1.5%
Tue Apr 3, 2001	4:30 - 7:00 PM	1544	3.9%
Tue Oct 3, 2000	4:30 - 7:00 PM	1771	1.6%
Tue Mar 16, 1999	4:30 - 7:00 PM	1719	1.9%
Wed Apr 22, 1998	4:30 - 7:00 PM	1838	4.8%
Wed Oct 1, 1997	4:30 - 7:00 PM	2217	5.4%
Thu Oct 24, 1996	4:30 - 7:00 PM	1820	3.4%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988

<sup>(</sup>b) Evening period of operation from 4:30 to 7:00 PM.

## Southbound - A.M.

Route 37 to N. San Pedro Road

Typical data for 2007 (5)

	PEAK PERIOD (4) 6:30 - 8:30 AM			X HOUR 7:30 AM
VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	76	2	40	2
Buses	23	24	13	11
Carpools (1)	1923	235	928	148
Vanpools	12	6	3	1
Hybrid/Single Occ. (2)	83	7542	47	3433
Violators	24	_	15	_
TOTAL	2141	7809	1046	3595
PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	76	2	40	2
Buses	805	840	455	385
Carpools (1)	3956	498	1929	309
Vanpools	120	60	30	10
Hybrid/Single Occ. (2)	83	7542	47	3433
Violators	24	_	15	_
TOTAL	5064	8942	2516	4139
RATES				
HOV Lane occupancy rate	2.4	persons/veh	2.4	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh	1.2	2 persons/veh
Overall occupancy (incl. buses)	1.4	persons/veh	1.4	persons/veh
Violation rate (3) (HOV Lane)	1.1	%	1.3	3 %
(2) (3)	Hybrid HOV Lan Violation rate =  HOV lane in open	no. of violators in I Total no. of vehicle cation from 6:30 to	es in HOV lane	_

## Northbound - P.M.

N. San Pedro Road to Route 37

Typical data for 2007 <sup>(5)</sup>

	PEAK PERIOD (4) 4:30 - 7:00 PM			HOUR 5:30 PM	
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	90	48	-	29	12
Buses	39	42		20	18
Carpools (1)	1622	1138	_	689	447
Vanpools	19	4	-	9	3
Hybrid/Single Occ. (2)	83	14348	_	37	5959
Violators	21	_		9	_
TOTAL	1874	15580	•	793	6439
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	90	48	_	29	12
Buses	1365	1470		700	630
Carpools (1)	3333	2400		1403	944
Vanpools	190	40	_	90	30
Hybrid/Single Occ. (2)	83	14348	_	37	5959
Violators	21			9	
TOTAL	5082	18306		2268	7575
RATES					
HOV Lane occupancy rate	2.7	persons/veh	•	2.9	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh		1.2	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.4	persons/veh
Violation rate (3) (HOV Lane)	1.1	%	-	1.0	%
(3)	Two or more occupants per vehicle.  Hybrid HOV Lane only/Single Occupancy mixed flow lane only.  Violation rate = no. of violators in HOV lane x 100%  Total no. of vehicles in HOV lane  HOV lane in operation from 4:30 to 7:00 P.M.  Observations conducted 09/13/07 at Manuel Freitas Truck Scale.				

## **Violation History**

Route 37 to N. San Pedro Road

### **Southbound**

### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu Sep 13, 2007	6:30 - 8:30 AM	2141	1.1%
Tue Oct 3, 2006	6:30 - 8:30 AM	2174	1.4%
Wed Nov 2, 2005	6:30 - 8:30 AM	2276	1.3%
Wed Nov 3, 2004	6:30 - 8:30 AM	2343	1.9%
Thu Apr 3, 2003	6:30 - 8:30 AM	2335	2.2%
Tue Mar 19, 2002	6:30 - 8:30 AM	2564	1.2%
Wed Oct 31, 2001	6:30 - 8:30 AM	2520	1.4%
Wed Mar 22, 2000	6:30 - 8:30 AM	2610	1.1%
Thu Mar 18, 1999	6:30 - 8:30 AM	2256	1.8%
Wed Mar 4, 1998	6:30 - 8:30 AM	2047	3.3%
Wed Nov 5, 1997	6:30 - 8:30 AM	2690	5.1%
Tue Nov 19, 1996	6:30 - 8:30 AM	2507	2.6%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988

<sup>(</sup>b) Morning period of operation from 6:30 to 8:30 AM.

## **Violation History**

N. San Pedro Road to Route 37

### **Northbound**

### P.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu Sep 13, 2007	4:30 - 7:00 PM	1874	1.1%
Wed Apr 5, 2006	4:30 - 7:00 PM	1559	2.2%
Thu Apr 21, 2005	4:30 - 7:00 PM	1545	4.0%
Thu Oct 7, 2004	4:30 - 7:00 PM	1577	2.5%
Wed Apr 9, 2003	4:30 - 7:00 PM	1851	3.2%
Thu Sep 19, 2002	4:30 - 7:00 PM	1552	2.6%
Tue Sep 18, 2001	4:30 - 7:00 PM	1580	1.1%
Tue Mar 21, 2000	4:30 - 7:00 PM	1921	2.7%
Thu Sep 16, 1999	4:30 - 7:00 PM	1841	4.0%
Tue Apr 7, 1998	4:30 - 7:00 PM	2147	2.4%
Thu Oct 2, 1997	4:30 - 7:00 PM	1867	3.2%
Thu Oct 17, 1996	4:30 - 7:00 PM	1983	3.9%

NOTES: (a) Minimum occupancy requirement was reduced to 2 persons per vehicle on October 1, 1988

(b) Evening period of operation from 4:30 to 7:00 PM.

### Southbound - P.M.

Route 101(Mountain View) to Route 280

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	83	0	34	0
Buses	1	0	0	0
Carpools (1)	2456	245	1007	13
Vanpools	38	0	16	0
Hybrid/Single Occ. (2)	252	9783	89	3261
Violators	117		11	
TOTAL	2947	10028	1157	3274

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	83	0	34	0
Buses	35	0	0	0
Carpools (1)	5146	508	2039	27
Vanpools	380	0	160	0
Hybrid/Single Occ. (2)	252	9783	89	3261
Violators	117	_	11	
ΤΟΤΔΙ	6013	10291	2333	3288

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.0 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (3) (HOV Lane)	4.0 %	1.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 12/12/07 at Fremont Avenue I/C

### Northbound - A.M.

Route 280 to Route 101 (Mountain View)

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	89	12	36	1
Buses	0	8	0	3
Carpools (1)	2297	256	836	85
Vanpools	7	2	2	0
Hybrid/Single Occ. (2)	328	12755	162	4611
Violators	1		0	
TOTAL	2722	13033	1036	4700

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	89	12	36	1
Buses	0	280	0	105
Carpools (1)	4769	542	1727	181
Vanpools	70	20	20	0
Hybrid/Single Occ. (2)	328	12755	162	4611
Violators	1	_	0	_
TOTAL	5257	13609	1945	4898

#### **RATES**

HOV Lane occupancy rate	1.9 persons/veh	1.9 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane)	0.0 %	0.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 04/17/07 at Fremont Avenue I/C

### **Violation History**

Route 101 (Mountain View) to Route 280

### **Southbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Wed Oct 23, 2002	7:00 - 9:00 AM	540	10.0%
Thu Jun 7, 2001	6:00 - 9:00 AM	560	4.1%
Wed Sep 27, 2000	6:00 - 9:00 AM	604	13.2%
Tue Jun 8, 1999	6:00 - 9:00 AM	597	9.4%
Wed Mar 04, 1998	6:00 - 9:00 AM	551	0.5%
Tue Feb 25, 1997	6:45 - 9:00 AM	397	5.3%
Wed Apr 3, 1996	6:00 - 9:00 AM	359	5.0%

**PERIOD** 

**TOTAL HOVL** 

### P.M. PEAK

Wed Dec 12, 2007	3:00 - 6:00 PM	2947	4.0%
Tue Oct 24, 2006	3:00 - 6:00 PM	2164	0.5%
Wed Oct 12, 2005	3:00 - 6:00 PM	2265	0.7%
Tue Nov 30, 2004	3:00 - 5:15 PM	1510	0.7%
Wed Jun 4, 2003	3:00 - 6:00 PM	2323	1.6%
Wed May 29, 2002	3:00 - 6:00 PM	2647	4.4%
Tue Sep 25, 2001	3:00 - 6:00 PM	2656	6.4%
Thu Jun 1, 2000	3:00 - 6:00 PM	2792	0.9%
Thu May 13, 1999	3:00 - 6:00 PM	3121	1.4%
Thu Apr 9, 1998	4:00 - 6:00 PM	2058	0.2%
Tue Sept 30, 1997	3:00 - 6:00 PM	2277	1.2%
Thu May 16, 1996	3:00 - 6:00 PM	2165	3.0%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 off-peak direction

## **Violation History**

Route 280 to Route 101 (Mountain View)

### **Northbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Tue Apr 17, 2007	6:00 - 9:00 AM	2722	0.0%
Wed Oct 11, 2006	6:00 - 9:00 AM	2501	0.7%
Tue Oct 18, 2005	6:00 - 9:00 AM	1703	3.0%
Wed Nov 3, 2004	6:00 - 9:00 AM	2132	0.7%
Wed Oct 29, 2003	6:00 - 9:00 AM	1151	0.8%
Tue Oct 8, 2002	7:00 - 9:00 AM	1435	1.5%
Tue Apr 10, 2001	6:00 - 9:00 AM	2471	1.8%
Tue Oct 17, 2000	7:00 - 9:00 AM	2188	10.1%
Wed Oct 6, 1999	6:00 - 9:00 AM	2402	4.9%
Tue Dec 1, 1998	6:00 - 9:00 AM	2473	4.7%
Thu Dec 4, 1997	7:00 - 9:00 AM	1584	0.1%
Wed Nov 20, 1996	6:45 - 9:00 AM	1840	0.2%

**PERIOD** 

TOTAL HOVL

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Thu Oct 31, 2002	3:00 - 5:30 PM	761	2.2%
Wed Oct 10, 2001	3:00 - 6:00 PM	1124	0.4%
Thu May 4, 2000	3:00 - 6:00 PM	940	2.1%
Thu Oct 28, 1999	3:00 - 6:00 PM	845	1.2%
Wed Mar 4, 1998	3:00 - 6:00 PM	852	3.5%
Tue Feb 25, 1997	3:00 - 6:00 PM	1051	2.7%
Tue Jun 4, 1996	3:00 - 6:00 PM	1008	8.2%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## Southbound - P.M.

Route 280 to Almaden Expressway

Typical data for 2007 (5)

#### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	29	1	_	15	0
Buses	7	17	_	4	1
Carpools (1)	2902	603	_	1015	199
Vanpools	6	6	_	3	2
Hybrid/Single Occ. (2)	280	11582	_	95	4050
Violators	35		_	5	
TOTAL	3259	12209		1137	4252

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	29	1	15	0
Buses	245	595	140	35
Carpools (1)	5912	1251	2061	408
Vanpools	60	60	30	20
Hybrid/Single Occ. (2)	280	11582	95	4050
Violators	35	_	5	
TOTAL	6561	13489	2346	4513

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	1.1 %	0.4 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 12/04/07 at Winchester Boulevard I/C

### Northbound - A.M.

Almaden Expressway to Route 280

Typical data for 2007 (5)

PF	ΔK	<b>PFR</b>	IOD	(4)
_	$\neg$ ı\			

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	105	3	_	29	0
Buses	4	6	_	3	2
Carpools (1)	2234	180	_	940	74
Vanpools	3	0	_	1	0
Hybrid/Single Occ. (2)	155	10732	_	50	3522
Violators	63		_	49	
TOTAL	2564	10921	_	1072	3598

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	105	3	29	0
Buses	140	210	105	70
Carpools (1)	4563	372	1930	154
Vanpools	30	0	10	0
Hybrid/Single Occ. (2)	155	10732	50	3522
Violators	63		49	_
TOTAL	5056	11317	2173	3746

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.0 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.3 persons/veh
Violation rate (3) (HOV Lane)	2.5 %	4.6 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{\text{no. of violators in HOV lane } x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 11/01/07 at Union Avenue I/C

## **Violation History**

Route 280 to Almaden Expressway

### **Southbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Wed May 1, 2002	6:00 - 9:00 AM	256	9.0%
Tue Apr 17, 2001	6:00 - 9:00 AM	341	5.9%
Tue May 2, 2000	6:00 - 9:00 AM	363	1.7%
Thu Mar 11, 1999	6:30 - 9:00 AM	371	0.3%
Tue Mar 3, 1998	6:00 - 9:00 AM	416	2.4%
Thu Nov 6, 1997	6:00 - 9:00 AM	456	8.6%
Wed May 01, 1996	6:30 - 9:00 AM	328	9.1%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Tue Dec 4, 2007	3:00 - 6:00 PM	3259	1.1%
Tue May 16, 2006	3:00 - 6:00 PM	2429	0.2%
Thu Oct 13, 2005	3:00 - 6:00 PM	2311	0.9%
Wed Oct 6, 2004	3:00 - 6:00 PM	2288	0.5%
Wed Oct 22, 2003	3:00 - 6:00 PM	2151	2.3%
Wed Mar 13, 2002	3:00 - 6:00 PM	2866	3.4%
Thu Apr 5, 2001	3:00 - 6:00 PM	2798	0.5%
Tue Apr 18, 2000	3:00 - 6:00 PM	3056	0.5%
Thu Mar 11, 1999	3:00 - 6:00 PM	2963	0.1%
Thu Jun 4, 1998	3:00 - 6:00 PM	3004	0.1%
Thu Feb 27, 1997	3:00 - 6:00 PM	2460	1.3%
Tue Apr 30, 1996	3:00 - 6:00 PM	3167	7.0%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

# **Violation History**

Almaden Expressway to Route 280

#### **Northbound**

**VIOLATION** 

### A.M. PEAK

Thu Nov 1, 2007 6:00 - 9:00 AM 2564 <b>2.5</b>	
	0/2
Wed Sep 27, 2006 6:00 - 9:00 AM 3298 <b>1.2</b>	/0
Thu Oct 6, 2005 6:00 - 9:00 AM 2418 <b>0.4</b>	%
Thu Oct 28, 2004 7:00 - 9:00 AM 1813 <b>0.4</b>	%
Wed Oct 22, 2003 7:00 - 9:00 AM 2012 <b>0.0</b>	%
Wed Mar 27, 2002 6:00 - 9:00 AM 2572 <b>4.6</b>	%
Tues Oct 16, 2001 6:00 - 9:00 AM 3298 <b>6.4</b>	%
Wed Jun 7, 2000 6:00 - 9:00 AM 3555 <b>9.9</b>	%
Tue Oct 26, 1999 7:00 - 9:00 AM 2350 <b>3.0</b>	%
Wed May 13, 1998 6:00 - 9:00 AM 2801 <b>12.</b> 2	2%
Wed Nov 5, 1997 6:00 - 9:00 AM 3036 <b>0.4</b>	%
Wed Nov 20,1996 6:45 - 9:00 AM 1840 <b>0.2</b>	%

**PERIOD** 

TOTAL HOVL

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Thu Apr 4, 2002	3:00 - 6:00 PM	1068	7.5%
Tue Jun 12, 2001	3:00 - 6:00 PM	985	8.9%
Tue Oct 17, 2000	3:00 - 6:00 PM	642	3.6%
Tue Feb 23, 1999	3:00 - 6:00 PM	866	8.7%
Wed Apr 8, 1998	3:00 - 6:00 PM	1097	4.4%
Wed Oct 8, 1997	3:00 - 6:00 PM	895	0.3%
Wed Sep 25, 1996	3:00 - 6:00 PM	1417	0.6%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## Southbound - P.M.

Almaden Expressway to Route 101 (So. San Jose)

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	40	12	10	3
Buses	10	23	6	6
Carpools (1)	1802	545	616	154
Vanpools	2	7	1	0
Hybrid/Single Occ. (2)	87	9906	31	3585
Violators	64		6	
TOTAL	2005	10493	670	3748

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	40	12	10	3
Buses	350	805	210	210
Carpools <sup>(1)</sup>	3728	1147	1269	318
Vanpools	20	70	10	0
Hybrid/Single Occ. (2)	87	9906	31	3585
Violators	64	_	6	
TOTAL	4289	11940	1536	4116

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.3 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	3.2 %	0.9 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 03/21/07 at Blossom Hill Road Train Station

### Northbound - A.M.

Route 101 (So. San Jose) to Almaden Expressway

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	78	42	26	19
Buses	0	0	0	0
Carpools (1)	1355	651	555	268
Vanpools	1	0	1	0
Hybrid/Single Occ. (2)	97	8120	36	2764
Violators	11	_	2	_
TOTAL	1542	8813	620	3051

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	78	42	26	19
Buses	0	0	0	0
Carpools (1)	2823	1409	1161	590
Vanpools	10	0	10	0
Hybrid/Single Occ. (2)	97	8120	36	2764
Violators	11		2	_
TOTAL	3019	9571	1235	3373

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.0 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.3 persons/veh
Violation rate (3) (HOV Lane)	0.7 %	0.3 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 05/22/07 at Blossom Hill Road Train Station

## **Violation History**

Almaden Expressway to Route 101 (So. San Jose)

### **Southbound**

**VIOLATION** 

**TOTAL HOVL** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Wed Apr 24, 2002	6:00 - 9:00 AM	675	0.3%
Wed May 2, 2001	6:00 - 9:00 AM	595	1.7%
Wed May 3, 2000	6:00 - 9:00 AM	635	7.1%
Wed Feb 3, 1999	6:00 - 9:00 AM	739	0.0%
Tue May 19, 1998	6:00 - 9:00 AM	602	0.0%
Thu Dec 4, 1997	6:00 - 9:00 AM	282	12.8%
Tue May 21, 1996	6:00 - 9:00 AM	324	13.0%

**PERIOD** 

#### P.M. PEAK

Wed Mar 21, 2007	3:00 - 6:00 PM	2005	3.2%
Thu Apr 20, 2006	3:00 - 6:00 PM	1547	3.4%
Thu Sep 29, 2005	3:00 - 6:00 PM	1601	0.9%
Thu Oct 14, 2004	3:00 - 6:00 PM	2050	0.2%
Thu Jun 5, 2003	3:00 - 6:00 PM	1652	0.6%
Thu May 2, 2002	3:00 - 6:00 PM	1981	3.8%
Wed Oct 3, 2001	3:00 - 6:00 PM	2418	0.2%
Wed Oct 18, 2000	3:00 - 6:00 PM	2354	0.6%
Tue May 18, 1999	3:00 - 6:00 PM	2112	2.5%
Thu Dec 3, 1998	3:00 - 6:00 PM	4447	0.0%
Thu Oct 16, 1997	3:00 - 6:00 PM	1754	3.6%
Thu Sep 19, 1996	3:00 - 6:00 PM	960	5.4%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## **Violation History**

Route 101 (So. San Jose) to Almaden Expressway

### **Northbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Tue May 22, 2007	6:00 - 9:00 AM	1542	0.7%
Tue May 23, 2006	6:00 - 9:00 AM	1131	3.8%
Thu Oct 13, 2005	6:00 - 9:00 AM	960	2.4%
Tue Nov 30, 2004	6:00 - 9:00 AM	1044	0.0%
Thu Oct 23, 2003	7:00 - 9:00 AM	1035	0.0%
Tue Mar 12, 2002	6:00 - 9:00 AM	939	2.6%
Thu Apr 12, 2001	6:00 - 9:00 AM	1678	7.3%
Thu Oct 5, 2000	7:00 - 9:00 AM	1222	5.2%
Tue Oct 5, 1999	6:00 - 9:00 AM	1669	1.1%
Wed Mar 25, 1998	6:00 - 9:00 AM	1482	0.4%
Thu Mar 6, 1997	6:30 - 9:00 AM	1019	7.7%
Thu Jun 13, 1996	6:00 - 9:00 AM	1151	8.4%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	_
Wed Apr 24, 2002	3:00 - 6:00 PM	976	5.0%
Tue Oct 9, 2001	3:00 - 6:00 PM	814	8.6%
Wed May 3, 2000	3:00 - 6:00 PM	784	5.6%
Thu Nov 17, 1999	3:00 - 5:30 PM	826	6.5%
Thu May 7, 1998	3:00 - 6:00 PM	1062	10.1%
Tue Oct 30, 1997	3:00 - 6:00 PM	1245	0.2%
Wed Mar 20, 1996	3:00 - 6:00 PM	907	9.0%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## Southbound - P.M.

Route 101 I/C to Route 280 I/C

Typical data for 2007 (5)

PF	AK	<b>PER</b>		(4)
ГЬ	$\Delta$		IUU	

#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	94	0	48	0
Buses	4	13	2	1
Carpools (1)	1187	205	556	21
Vanpools	2	9	2	1
Hybrid/Single Occ. (2)	75	9118	53	3273
Violators	11		3	
TOTAL	1373	9345	664	3296

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	94	0	48	0
Buses	140	455	70	35
Carpools (1)	2486	457	1151	42
Vanpools	20	90	20	10
Hybrid/Single Occ. (2)	75	9118	53	3273
Violators	11		3	
TOTAL	2826	10120	1345	3360

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.0 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (3) (HOV Lane)	0.8 %	0.5 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 10/03/07 at Taylor Avenue I/C

### Northbound - A.M.

Route 280 I/C to Route 101 I/C

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	78	28	_	35	11
Buses	11	5	_	3	0
Carpools (1)	764	170	_	318	37
Vanpools	3	4	_	1	4
Hybrid/Single Occ. (2)	112	10447	_	57	3859
Violators	80			17	
TOTAL	1048	10654	_	431	3911

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	78	28	35	11
Buses	385	175	105	0
Carpools (1)	1628	362	680	81
Vanpools	30	40	10	40
Hybrid/Single Occ. (2)	112	10447	57	3859
Violators	80	_	17	
TOTAL	2313	11052	904	3991

#### **RATES**

HOV Lane occupancy rate	2.2 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.1 persons/veh	1.1 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	7.6 %	3.9 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 09/25/07 at Taylor Avenue I/C

# **Violation History**

Rte 101 I/C to Route 280 I/C

**Southbound** 

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2007	-	-	-
P.M. PEAK	Wed Oct 3, 2007	3:00-6:00 PM	1373	0.8%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

- (b) Evening period of operation from 3:00 to 7:00 PM.
- $(c) \ \textit{Data was not collected in 2007 for off-peak direction}$

## **Violation History**

Route 280 I/C to Route 101 I/C

#### **Northbound**

### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Tue Sep 25, 2007	6:00 - 9:00 AM	1048	7.6%
Thu Sep 21, 2006	6:00 - 9:00 AM	532	1.7%
Tue Nov 8, 2005	6:00 - 9:00 AM	494	3.2%

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

- (b) Evening period of operation from 3:00 to 7:00 PM.
- (c) Data was not collected in 2007 for off-peak direction

## Southbound - P.M.

Route 280 I/C Avenue to Route 85

Typical data for 2007 (5)

PF	=Δ	K	PI	FR	IO	D	(4)
					$\cdot \cdot \cdot$	_	

### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	60	35	21	8
Buses	3	11	0	0
Carpools (1)	1153	1502	410	457
Vanpools	3	2	0	0
Hybrid/Single Occ. (2)	38	10949	14	3794
Violators	69		4	
TOTAL	1326	12499	449	4259

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	60	35	21	8
Buses	105	385	0	0
Carpools (1)	2402	3264	859	990
Vanpools	30	20	0	0
Hybrid/Single Occ. (2)	38	10949	14	3794
Violators	69	_	4	
TOTAL	2704	14653	898	4792

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.0 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.2 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	5.2 %	0.9 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 06/13/07 at Capitol Avenue I/C

### Northbound - A.M.

Route 85 I/C to Route 280 I/C

Typical data for 2007 (5)

PF	=Δ	K	ΡI	FR	210	חו	(4)

### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	62	2	23	0
Buses	1	45	0	6
Carpools <sup>(1)</sup>	1835	148	737	65
Vanpools <sub>_</sub>	1	2	0	2
Hybrid/Single Occ. (2)	107	9582	59	3254
Violators	15		9	
TOTAL	2021	9779	828	3327

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	62	2	23	0
Buses	35	1575	0	210
Carpools (1)	3749	309	1506	137
Vanpools	10	20	0	20
Hybrid/Single Occ. (2)	107	9582	59	3254
Violators	15		9	_
TOTAL	3978	11488	1597	3621

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	1.9 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	0.7 %	1.1 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 10/11/07 at Curtner Ave I/C

# **Violation History**

Route 280 I/C to Jct Rte 85

#### Southbound

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2007	-	-	-
P.M. PEAK	Wed June 13, 07	3:00-6:00 PM	1326	5.2%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

- (b) Evening period of operation from 3:00 to 7:00 PM.
- (c) Data was not collected in 2007 for off-peak direction

# **Violation History**

Jct Rte 85 to Route 280 I/C

**Northbound** 

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Oct 11, 2007	6:00 - 9:00 AM	2021	0.7%
P.M. PEAK	Year 2007	-	-	

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

- (b) Evening period of operation from 3:00 to 7:00 PM.
- (c) Data was not collected in 2007 for off-peak direction

## Southbound - A.M.

SM/SCL County Line to Ellis Street

Typical data for 2007 (5)

PF	ΔK	<b>PER</b>		(4)
ГЬ	$\neg$		IUU	

### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	53	12	27	1
Buses	14	8	8	4
Carpools (1)	1332	492	565	136
Vanpools	3	1	0	1
Hybrid/Single Occ. (2)	268	13665	157	5323
Violators	32		23	
TOTAL	1702	14178	780	5465

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	53	12	27	1
Buses	490	280	280	140
Carpools (1)	2855	1078	1176	295
Vanpools	30	10	0	10
Hybrid/Single Occ. (2)	268	13665	157	5323
Violators	32	_	23	
TOTAL	3728	15045	1663	5769

#### **RATES**

HOV Lane occupancy rate	2.2 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane)	1.9 %	2.9 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 11/14/07 at the San Antonio Road

## Southbound - P.M.

SM/SCL County Line to Ellis Street

Typical data for 2007 (5)

PF	ΔΚ	<b>PFR</b>		(4)
	$\neg$	1 – 11	w	

### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	95	15		44	5
Buses	8	10	_	3	5
Carpools (1)	2490	1300	_	941	412
Vanpools	23	6	_	4	1
Hybrid/Single Occ. (2)	140	13557	_	81	4757
Violators	7	_	_	3	
TOTAL	2763	14888	_	1076	5180

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	95	15	44	5
Buses	280	350	105	175
Carpools (1)	5111	2802	1934	902
Vanpools	230	60	40	10
Hybrid/Single Occ. (2)	140	13557	3	4757
Violators	7		81	_
TOTAL	5863	16784	2207	5849

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (3) (HOV Lane)	0.3 %	0.3 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 04/04/07 at the San Antonio Road

### Northbound - A.M.

Ellis Street to SCL/SM County Line

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	71	26	22	13
Buses	12	24	3	6
Carpools (1)	1968	303	799	151
Vanpools	13	2	5	1
Hybrid/Single Occ. (2)	237	15737	82	5654
Violators	0		0	
TOTAL	2301	16092	911	5825

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	71	26	22	13
Buses	420	840	105	210
Carpools (1)	3981	648	1618	323
Vanpools	130	20	50	10
Hybrid/Single Occ. (2)	237	15737	82	5654
Violators	0		0	
TOTAL	4839	17271	1877	6210

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane)	0.0 %	0.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 11/06/07 at at the San Antonio Road I/C

## Northbound - P.M.

Ellis Street to SM/SCL County Line

Typical data for 2007 (5)

<b>PEAK</b>	<b>PERIOD</b>	(4)
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### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	106	5		24	0
Buses	14	5	_	6	2
Carpools (1)	2373	442	_	840	141
Vanpools	9	7	_	2	1
Hybrid/Single Occ. (2)	186	12653	_	52	4441
Violators	12			5	
TOTAL	2700	13112		929	4585

PERSONS		HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
	Motorcycles	106	5	_	24	0
	Buses	490	175	_	210	70
	Carpools (1)	4867	924	_	1735	297
	Vanpools	90	70	_	20	10
	Single Occ. (2)	186	12653	_	52	4441
	Violators	12		_	5	
	TOTAL	5751	13827		2046	4818

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.2 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane)	0.4 %	0.5 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 09/11/07 at the San Antonio Road I/C

# **Violation History**

SM/SCL County Line to Ellis Street

### Southbound

**VIOLATION** 

#### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Wed Nov 14, 2007	6:00 - 9:00 AM	1702	1.9%
Tue Dec 5, 2006	6:00 - 9:00 AM	1352	0.7%
Thu Sep 15, 2005	6:00 - 9:00 AM	1654	0.5%
Wed Nov 17, 2004	6:00 - 9:00 AM	1762	0.3%
Thu Oct 30, 2003	6:00 - 9:00 AM	1970	6.6%
Wed May 15, 2002	6:00 - 9:00 AM	1949	6.6%
Wed Mar 21, 2001	6:00 - 9:00 AM	2710	0.8%
Wed Sep 13, 2000	6:00 - 9:00 AM	2823	10.5%
Wed Apr 28, 1999	6:00 - 9:00 AM	2817	3.3%
Thu Mar 12, 1998	6:00 - 9:00 AM	2885	0.6%
Tue Dec 2, 1997	6:00 - 9:00 AM	2773	2.1%
Thu Apr 25, 1996	6:30 - 9:00 AM	3742	1.5%
Thu Jun 8, 1995	6:00 - 9:00 AM	2973	1.6%
Thu May 5, 1994	6:00 - 9:00 AM	2684	4.8%
Thu Jun 24, 1993	6:00 - 9:00 AM	1629	8.0%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Wed Apr 4, 2007	3:00 - 6:00 PM	2763	0.3%
Wed Apr 26, 2006	3:00 - 6:00 PM	2509	3.1%
Wed Mar 30, 2005	3:00 - 6:00 PM	3001	3.6%
Wed Oct 27, 2004	3:00 - 6:00 PM	2420	0.3%
Tue Oct 28, 2003	3:00 - 5:45 PM	2608	1.4%
Tue May 14, 2002	3:00 - 6:00 PM	2119	0.7%
Wed Oct 24, 2001	3:00 - 6:00 PM	2935	4.4%
Thu Mar 25, 1999	3:00 - 6:00 PM	3037	1.2%
Thu Mar 25, 1999	3:00 - 6:00 PM	3037	1.2%
Tue Mar 17, 1998	3:00 - 6:00 PM	2406	0.7%
Wed Oct 29, 1997	3:00 - 6:00 PM	2666	0.0%
Wed Oct 2 1996	3:00 - 6:00 PM	2836	0.6%
Wed Oct 4 1995	3:00 - 6:00 PM	2591	3.9%
Thu Apr 21, 1994	3:00 - 7:00 PM	4979	14.7%
Wed May 12, 1993	3:00 - 6:00 PM	1995	13.4%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

<sup>(</sup>b) Evening period of operation from 3:00 to 7:00 PM.

# **Violation History**

Ellis Street to SM/SCL County Line

#### **Northbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Tue Nov 6, 2007	6:00 - 9:00 AM	2301	0.0%
Thu Jun 1, 2006	6:00 - 9:00 AM	2581	12.1%
Thu Sep 22, 2005	6:00 - 9:00 AM	2494	4.5%
Tue Nov 2, 2004	6:00 - 9:00 AM	1641	0.3%
Thu May 22, 2003	6:00 - 9:00 AM	2132	5.8%
Wed Sept 25, 2002	6:45 - 9:00 AM	1479	2.4%
Thu Oct 4, 2001	6:00 - 9:00 AM	1942	6.0%
Thu May 18, 2000	6:00 - 9:00 AM	2047	5.1%
Thu Nov 18, 1999	6:30 - 9:00 AM	1745	2.5%
Thu Mar 26, 1998	6:00 - 9:00 AM	1986	0.1%
Tue Dec 2, 1997	7:00 - 9:00 AM	1720	3.8%
Wed Jun 12, 1996	6:00 - 9:00 AM	3249	0.7%
Thu May 4, 1995	6:00 - 9:00 AM	2070	5.9%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Tue Sep 11, 2007	3:00 - 6:00 PM	2700	0.4%
Tue Dec 5, 2006	3:00 - 6:00 PM	2090	0.1%
Wed Oct 5, 2005	3:00 - 6:00 PM	1656	0.8%
Thu Dec 2, 2004	3:00 - 5:00 PM	1369	2.8%
Tue Jun 3, 2003	3:00 - 6:00 PM	2635	7.2%
Thu Jun 6, 2002	3:00 - 6:00 PM	3064	2.1%
Wed Oct 17, 2001	3:00 - 6:00 PM	2523	3.2%
Tue Nov 7, 2000	3:00 - 6:00 PM	3032	4.6%
Tue Apr 27, 1999	3:00 - 6:00 PM	3034	1.5%
Wed Mar 11, 1998	3:00 - 6:00 PM	2464	1.3%
Thu Apr 24, 1997	3:00 - 6:00 PM	3693	0.2%
Tue Nov 12, 1996	3:00 - 6:00 PM	3151	0.1%
Wed Mar 15, 1995	3:00 - 6:00 PM	4260	3.4%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

## Southbound - P.M.

Ellis Street to Guadalupe Parkway

Typical data for 2007 (5)

PF	ΔK	PFR		(4)
ГС	H	$\Gamma \sqcup \Gamma$	IUU	

### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	84	9	47	2
Buses	11	11	3	1
Carpools (1)	3080	651	1243	202
Vanpools	14	6	5	1
Hybrid/Single Occ. (2)	69	13362	25	4717
Violators	8		0	
TOTAL	3266	14039	1323	4923

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	84	9	47	2
Buses	385	385	105	35
Carpools (1)	6274	1350	2498	423
Vanpools	140	60	50	10
Hybrid/Single Occ. (2)	69	13362	25	4717
Violators	8		0	_
TOTAL	6960	15166	2725	5187

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (HOV Lane)	0.2 %	0.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 11/15/07 at the San Tomas Expressway I/C

### Northbound - A.M.

Guadalupe Parkway to Ellis Street

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	76	30	24	17
Buses	8	8	4	3
Carpools (1)	2139	532	907	190
Vanpools	3	13	1	3
Hybrid/Single Occ. (2)	123	14644	28	5380
Violators	22		15	
TOTAL	2371	15227	979	5593

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	76	30	24	17
Buses	280	280	140	105
Carpools (1)	4381	1138	1870	411
Vanpools	30	130	10	30
Hybrid/Single Occ. (2)	123	14644	28	5380
Violators	22		15	
TOTAL	4912	16222	2087	5943

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane)	0.9 %	1.5 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 11/15/07 at the Fair Oaks Avenue I/C

# **Violation History**

Ellis Street to Guadalupe Parkway

#### **Southbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Tue Dec 3, 2002	6:00 - 9:00 AM	668	2.2%
Tue Jun 5, 2001	6:00 - 9:00 AM	765	2.1%
Thu Apr 20, 2000	6:00 - 9:00 AM	916	3.8%
Thur Oct 21, 1999	7:00 - 9:00 AM	739	1.8%
Thu Apr 9, 1998	6:00 - 9:00 AM	1163	4.3%
Wed Dec 3, 1997	6:00 - 9:00 AM	1272	8.6%
Thu Nov 7, 1996	6:45 - 9:00 AM	2212	1.1%
Wed Oct 4, 1995	7:00 - 9:00 AM	1057	4.5%
-			

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Thu Nov 15, 2007	3:00 - 6:00 PM	3266	0.2%
Tue Apr 18, 2006	3:00 - 6:00 PM	2779	0.3%
Wed Apr 27, 2005	3:00 - 6:00 PM	2964	0.3%
Tue Nov 16, 2004	3:00 - 5:30 PM	2190	0.4%
Thu May 29, 2003	3:00 - 6:00 PM	3454	3.6%
Thu Apr 11, 2002	3:00 - 6:00 PM	2912	1.2%
Thu Mar 29, 2001	3:00 - 6:00 PM	3903	3.1%
Wed Nov 15, 2000	3:00 - 5:30 PM	3077	2.7%
Wed Oct 20, 1999	3:00 - 6:00 PM	3954	2.3%
Thu May 14, 1998	4:00 - 6:30 PM	3124	0.2%
Tue Apr 22, 1997	3:00 - 6:00 PM	3268	1.0%
Wed May 22, 1996	3:00 - 6:00 PM	3832	1.3%
Thu Apr 20, 1995	3:00 - 7:00 PM	5831	1.5%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

<sup>(</sup>b) Evening period of operation from 3:00 to 7:00 PM.

<sup>(</sup>c) Data was not collected in 2007 for off-peak direction

# **Violation History**

Guadalupe Parkway to Ellis Street

### **Northbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Thu Nov 15, 2007	6:00 - 9:00 AM	2371	0.9%
Tue Nov 14, 2006	6:00 - 9:00 AM	1811	0.7%
Wed Oct 26, 2005	7:00 - 9:00 AM	1221	0.4%
Tue Nov 16, 2004	6:00 - 9:00 AM	1799	0.7%
Wed May 7, 2003	6:00 - 9:00 AM	2142	0.6%
Thu Apr 4, 2002	6:00 - 9:00 AM	1646	7.5%
Wed Sep 26, 2001	6:00 - 9:00 AM	1607	0.8%
Tue Apr 4, 2000	6:00 - 9:00 AM	1527	2.8%
Wed Oct 20, 1999	7:00 - 9:00 AM	1299	0.5%
Thu Oct 1, 1998	7:00 - 9:00 AM	1268	1.6%
Thu Nov 20, 1997	6:00 - 9:00 AM	1700	0.0%
Thu Sep 26, 1996	7:00 - 9:00 AM	1765	0.7%
Thu Oct 5, 1995	7:00 - 9:00 AM	1594	3.8%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Wed May 22, 2002	3:00 - 6:00 PM	1487	3.8%
Wed May 10, 2000	3:00 - 6:00 PM	1684	0.3%
Tue Jun 8, 1999	3:00 - 6:00 PM	1765	2.2%
Thu May 21, 1998	3:00 - 6:00 PM	2066	4.5%
Thu Apr 10, 1997	3:00 - 6:00 PM	1563	1.5%
Tue May 21, 1996	3:00 - 6:00 PM	2126	4.2%
Tue Oct 17, 1995	3:00 - 6:00 PM	1910	6.0%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## Southbound - P.M.

Guadalupe Parkway to Route 280/680

Typical data for 2007 (5)

<b>PEAK</b>	PERI	OD	(4)
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### **PEAK HOUR**

3:00 - 6:00 PM

3:00 - 4:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	53	9	15	1
Buses	14	2	7	0
Carpools (1)	2885	570	1383	319
Vanpools	36	1	21	1
Hybrid/Single Occ. (2)	98	12516	40	3862
Violators	12		7	
TOTAL	3098	13098	1473	4183

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	53	9	15	1
Buses	490	70	245	0
Carpools (1)	6559	1194	3359	660
Vanpools	360	10	210	10
Hybrid/Single Occ. (2)	98	12516	40	3862
Violators	12		7	_
TOTAL	7572	13799	3876	4533

#### **RATES**

HOV Lane occupancy rate	2.4 persons/veh	2.6 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.5 persons/veh
Violation rate (HOV Lane)	0.4 %	0.5 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 12/13/07 at the McKee Road I/C

### Northbound - A.M.

Route 280/680 to Guadalupe Parkway

Typical data for 2007 (5)

ΡI	FΔ	K	PE	RΙ	0	ח	(4)
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### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	<u>+</u>	IOV Lane	Mixed Flow Lanes
Motorcycles	55	5		20	2
Buses	6	25		3	3
Carpools (1)	3698	573		1501	299
Vanpools	4	20		2	5
Hybrid/Single Occ. (2)	148	15724		68	5656
Violators	3			2	
TOTAL	3914	16347		1596	5965

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	55	5	20	2
Buses	210	875	105	105
Carpools (1)	7549	1197	3090	630
Vanpools	40	200	20	50
Hybrid/Single Occ. (2)	148	15724	68	5656
Violators	3	_	2	_
TOTAL	8005	18001	3305	6443

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (HOV Lane)	0.1 %	0.1 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 12/11/07 at the McKee Road I/C

# **Violation History**

Guadalupe Parkway to Route 280/680 I/C

### **Southbound**

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Year 2007	-	-	-
	Year 2006	-	-	-
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu May 30, 2002	6:00 - 9:00 AM	339	3.5%
	Thu Oct 18, 2001	6:00 - 9:00 AM	495	3.0%
	Thu Jun 8, 2000	6:00 - 9:00 AM	485	11.8%
	Wed Mar 24, 1999	6:00 - 9:00 AM	378	9.5%
	Thu Apr 2, 1998	6:00 - 9:00 AM	436	6.7%
	Wed Mar 5, 1997	6:30 - 9:00 AM	438	2.1%
	Thu Oct 24, 1996	7:00 - 9:00 AM	550	0.4%
	Wed Oct 18, 1995	7:00 - 9:00 AM	172	3.5%
P.M. PEAK	Thu Dec 13, 2007	3:00 - 6:00 PM	3098	0.4%
	Tue May 9, 2006	3:00 - 6:00 PM	2216	0.1%
	Wed Sep 21, 2005	3:00 - 6:00 PM	2452	0.2%
	Tue Nov 9, 2004	3:00 - 5:30 PM	1947	0.7%

#### P.N

Thu Dec 13, 2007	3:00 - 6:00 PM	3098	0.4%
Tue May 9, 2006	3:00 - 6:00 PM	2216	0.1%
Wed Sep 21, 2005	3:00 - 6:00 PM	2452	0.2%
Tue Nov 9, 2004	3:00 - 5:30 PM	1947	0.7%
Thu Apr 3, 2003	3:00 - 6:00 PM	1860	0.5%
Thu Jun 13, 2002	3:00 - 6:00 PM	2342	1.3%
Tue Mar 27, 2001	3:00 - 6:00 PM	2840	2.6%
Thu May 11, 2000	3:00 - 6:00 PM	3049	1.7%
Tue Dec 14, 1999	3:00 - 5:30 PM	2418	0.4%
Thu Sep 17, 1998	3:00 - 6:00 PM	3499	2.5%
Tue Sept 23, 1997	3:00 - 6:00 PM	2965	0.5%
Wed Oct 23, 1996	3:00 - 6:00 PM	3230	0.3%
Wed Apr 19, 1995	3:00 - 7:00 PM	3957	2.9%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

# **Violation History**

Route 280/680 I/C to Guadalupe Parkway

#### **Northbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Tue Dec 11, 2007	6:00 - 9:00 AM	3914	0.1%
Tue May 16, 2006	6:00 - 9:00 AM	3374	3.8%
Wed Mar 30, 2005	6:00 - 9:00 AM	4026	6.8%
Thu Dec 2, 2004	6:00 - 9:00 AM	3561	0.2%
Thu Jun 12, 2003	6:00 - 9:00 AM	3794	2.6%
Thu Apr 11, 2002	6:30 - 9:00 AM	3438	2.7%
Thu May 11, 2000	6:00 - 9:00 AM	4839	2.4%
Wed Apr 14, 1999	6:00 - 9:00 AM	4717	2.9%
Thu Dec 10, 1998	6:00 - 9:00 AM	4589	1.8%
Wed Sep 24, 1997	7:00 - 9:00 AM	2994	2.4%
Wed May 22, 1996	6:00 - 9:00 AM	5386	0.8%
Thu Nov 2, 1995	6:00 - 9:00 AM	5061	0.5%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Thu May 23, 2002	3:00 - 6:00 PM	1264	1.6%
Thu Apr 27, 2000	3:00 - 6:00 PM	1318	3.7%
Tue Dec 7, 1999	3:00 - 5:00 PM	1314	4.3%
Wed Nov 4, 1998	3:00 - 5:30 PM	1393	0.7%
Wed Apr 30, 1997	3:00 - 6:00 PM	2171	0.2%
Thu Nov 14, 1996	3:00 - 6:00 PM	1743	0.0%
Wed Oct 11, 1995	3:00 - 6:00 PM	1370	6.0%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

- (b) Evening period of operation from 3:00 to 7:00 PM.
- (c) Data was not collected in 2007 for off-peak direction

## Southbound - P.M.

Route 280/680 to Bernal Road

Typical data for 2007 (5)

PF	ΔΚ	<b>PFR</b>		(4)
	$\neg$	1 – 11	w	

### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	78	46	29	14
Buses	9	3	4	0
Carpools (1)	1684	1495	581	487
Vanpools	13	5	7	0
Hybrid/Single Occ. (2)	75	10769	26	3819
Violators	22		5	_
TOTAL	1881	12318	652	4320

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	78	46	29	14
Buses	315	105	140	0
Carpools (1)	3706	3282	1273	1043
Vanpools	130	50	70	0
Hybrid/Single Occ. (2)	75	10769	26	3819
Violators	22	_	5	_
TOTAL	4326	14252	1543	4876

#### **RATES**

HOV Lane occupancy rate	2.3 persons/veh	2.4 persons/veh
Mixed Flow occupancy rate	1.2 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (HOV Lane)	1.2 %	0.8 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 05/08/07 at the Hellyer Avenue I/C

### Northbound - A.M.

Bernal Road to Route 280/680 I/C

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	 HOV Lane	Mixed Flow Lanes
Motorcycles	81	16	33	8
Buses	5	3	 3	1
Carpools (1)	1378	586	 578	206
Vanpools	3	1	 1	1
Hybrid/Single Occ. (2)	99	12974	 45	4487
Violators	9		5	
TOTAL	1575	13580	665	4703

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	81	16	33	8
Buses	175	105	105	35
Carpools <sup>(1)</sup>	2833	1278	1203	448
Vanpools	30	10	10	10
Hybrid/Single Occ. (2)	99	12974	45	4487
Violators	8	_	5	
TOTAL	3227	14383	1401	4988

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (3) (HOV Lane)	0.6 %	0.8 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 04/10/07 at the Hellyer Avenue I/C

# **Violation History**

Route 280/680 I/C to Bernal Road

### Southbound

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Thu Jun 6, 2002	6:00 - 9:00 AM	730	5.6%
Thu Apr 19, 2001	6:00 - 9:00 AM	746	5.4%
Wed Oct 4, 2000	7:00 - 9:00 AM	413	5.6%
Wed Nov 3, 1999	6:00 - 9:00 AM	660	0.9%
Thur May 6, 1998	6:00 - 9:00 AM	576	0.7%
Thu May 22, 1997	6:30 - 9:00 AM	473	6.1%
Thu Oct 17, 1996	7:00 - 9:00 AM	538	0.7%
Tue Oct 24, 1995	7:00 - 9:00 AM	538	6.5%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Tue May 8, 2007	3:00 - 6:00 PM	1881	1.2%
Wed May 3, 2006	3:00 - 6:00 PM	2127	3.3%
Thu Mar 10, 2005	3:00 - 6:00 PM	2225	0.6%
Tue Nov 23, 2004	3:00 - 5:30 PM	1747	0.3%
Thu May 1, 2003	3:00 - 6:00 PM	2204	1.6%
Tue Mar 19, 2002	3:00 - 6:00 PM	1496	2.0%
Wed May 16, 2001	3:00 - 6:00 PM	1732	0.8%
Tue Sep 19, 2000	3:00 - 6:00 PM	1898	0.7%
Tue Mar 16, 1999	3:00 - 6:30 PM	702	4.6%
Wed Apr 22,1998	3:00 - 6:00 PM	1498	0.1%
Tue Oct 7, 1997	3:00 - 6:00 PM	1843	0.1%
Wed Dec 11,1996	3:00 - 5:30 PM	1426	3.6%
Wed May 3, 1995	3:00 - 7:00 PM	2181	11.0%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

# **Violation History**

Bernal Road to Route 280/680 I/C

#### **Northbound**

**VIOLATION** 

#### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Tue Apr 10, 2007	6:00 - 9:00 AM	1575	0.6%
Tue Apr 18, 2006	6:00 - 9:00 AM	2019	2.2%
Tue Apr 19, 2005	6:00 - 9:00 AM	2366	0.8%
Tue Dec 14, 2004	6:00 - 9:00 AM	1668	1.3%
Tue Jun 3, 2003	6:00 - 9:00 AM	2620	1.0%
Thu May 16, 2002	6:00 - 9:00 AM	1859	2.7%
Tue Apr 3, 2001	6:00 - 9:00 AM	2258	3.5%
Thu Nov 30, 2000	7:00 - 9:00 AM	1503	2.3%
Tue Dec 7, 1999	6:30 - 9:00 AM	2550	4.9%
Tue Dec 8, 1998	6:00 - 9:00 AM	2663	4.8%
Wed May 21, 1997	6:30 - 9:00 AM	1932	0.9%
Thu Jun 6, 1996	6:00 - 9:00 AM	2225	0.2%
Tue Apr 18, 1995	6:00 - 9:00 AM	1614	0.9%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Wed Mar 27, 2002	3:00 - 6:00 PM	1156	3.1%
Tue May 15, 2001	3:00 - 6:00 PM	1155	5.4%
Wed Apr 5, 2000	3:00 - 6:00 PM	1169	5.9%
Wed May 26, 1999	3:00 - 6:00 PM	1255	5.1%
Thu Apr 23, 1998	3:00 - 6:00 PM	995	4.6%
Wed Mar 12, 1997	3:00 - 6:00 PM	803	0.4%
Wed Dec 4, 1996	3:00 - 5:30 PM	777	3.3%
Thu Oct 19, 1995	3:00 - 6:00 PM	794	2.3%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## Southbound - P.M.

Bernal Road to Cochrane Road

Typical data for 2007 (5)

PE	Δ	K	P	F	RI	C	D	(4)
-				_	•	$\mathbf{\sim}$	$\boldsymbol{-}$	

### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	27	33	2	10
Buses	13	6	5	0
Carpools (1)	1946	678	692	135
Vanpools	79	8	39	1
Hybrid/Single Occ. (2)	104	12162	49	4305
Violators	8		3	
TOTAL	2177	12887	790	4451

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	27	33	2	10
Buses	455	210	175	0
Carpools (1)	4116	1446	1446	284
Vanpools	790	80	390	10
Hybrid/Single Occ. (2)	104	12162	49	4305
Violators	8	_	3	_
TOTAL	5500	13931	2065	4609

#### **RATES**

HOV Lane occupancy rate	2.5 persons/veh	2.6 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (3) (HOV Lane)	0.4 %	0.4 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 05/15/07 at Coyote Creek Golf Drive I/C

## Northbound - A.M.

Cochrane Road to Bernal Road

Typical data for 2007 (5)

PF	ΔΚ	<b>PFR</b>		(4)
	$\neg$	1 – 11	w	

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	23	6	10	0
Buses	9	18	4	2
Carpools (1)	1920	259	813	107
Vanpools	5	1	3	0
Hybrid/Single Occ. (2)	135	10397	65	3455
Violators	7		5	
TOTAL	2099	10681	900	3564

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	23	6	10	0
Buses	315	630	140	70
Carpools (1)	3938	547	1687	220
Vanpools	50	10	30	0
Hybrid/Single Occ. (2)	135	10397	65	3455
Violators	7	_	5	_
TOTAL	4468	11590	1937	3745

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.2 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (3) (HOV Lane)	0.3 %	0.6 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 12/06/07 at Coyote Creek Golf Drive I/C

# **Violation History**

Bernal Road to Cochrane Road

#### **Southbound**

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-

**TOTAL HOVL** 

**PERIOD** 

#### P.M. PEAK

Tue May 15, 2007	3:00 - 6:00 PM	2177	0.4%
Wed Apr 19, 2006	3:00 - 6:00 PM	1652	1.2%
Tue Sep 13, 2005	3:00 - 6:00 PM	2102	0.1%
Wed Nov 3, 2004	3:00 - 5:30 PM	1493	1.5%
Wed May 21, 2003	3:00 - 6:00 PM	1775	1.1%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

<sup>(</sup>b) Evening period of operation from 3:00 to 7:00 PM.

<sup>(</sup>c) Data was not collected in 2007 for off-peak period

# **Violation History**

Cochrane Road to Bernal Road

#### **Northbound**

**VIOLATION** 

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л.	IVI.		$\neg$

DATE	MONITORED	VOLUME	RATE
Thu Dec 6, 2007	6:00 - 9:00 AM	2099	0.3%
Tue Dec 19, 2006	6:00 - 9:00 AM	2799	1.0%
Wed Dec 14, 2005	6:00 - 9:00 AM	1827	1.4%
Tue Nov 9, 2004	6:00 - 9:00 AM	2120	0.2%
Tue Oct 28, 2003	6:00 - 9:00 AM	1720	0.0%

**TOTAL HOVL** 

**PERIOD** 

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

- (b) Evening period of operation from 3:00 to 7:00 PM.
- (c) Data was not collected in 2007 for off-peak direction

### Westbound - A.M.

Route 880/237 I/C to Mathilda Avenue

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

7:00 - 8:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	107	30	38	6
Buses	9	15	2	3
Carpools (1)	1625	165	706	60
Vanpools	3	2	2	1
Hybrid/Single Occ. (2)	346	12514	245	4380
Violators	2		2	
TOTAL	2092	12726	995	4450

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	107	30	38	6
Buses	315	525	70	105
Carpools (1)	3352	361	1452	137
Vanpools	30	20	20	10
Hybrid/Single Occ. (2)	346	12514	245	4380
Violators	2	_	2	_
TOTAL	4152	13450	1827	4638

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	1.8 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (3) (HOV Lane)	0.1 %	0.2 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 09/18/07 at the Zanker Road I/C

### Westbound - P.M.

Route 880/237 I/C to Mathilda Avenue

Typical data for 2007 (5)

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#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	52	13	22	1
Buses	5	19	3	0
Carpools (1)	1323	483	663	71
Vanpools	1	0	0	0
Hybrid/Single Occ. (2)	126	9332	66	3649
Violators	134		15	
TOTAL	1641	9847	769	3721

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	52	13	22	1
Buses	175	665	105	0
Carpools (1)	2778	1002	1398	142
Vanpools	10	0	0	0
Hybrid/Single Occ. (2)	126	9332	66	3649
Violators	134	_	15	_
TOTAL	3275	11012	1606	3792

#### **RATES**

HOV Lane occupancy rate	2.0 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane)	8.2 %	2.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 06/12/07 at the Zanker Road I/C

### Eastbound - A.M.

Mathilda Avenue to Route 880/237 I/C

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	32	11	_	16	6
Buses	10	1	_	4	0
Carpools (1)	616	251	_	272	89
Vanpools <sub>_</sub>	0	0	_	0	0
Hybrid/Single Occ. (2)	80	8322	_	62	4017
Violators	3		_	0	
TOTAL	741	8585		354	4112

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	32	11	16	6
Buses	350	35	140	0
Carpools (1)	1260	520	558	187
Vanpools	0	0	0	0
Hybrid/Single Occ. (2)	80	8322	62	4017
Violators	3	_	0	_
TOTAL	1725	8888	776	4210

#### **RATES**

HOV Lane occupancy rate	2.3 persons/veh	2.2 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.1 persons/veh	1.1 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	0.4 %	0.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 11/29/07 at the Zanker Road I/C

### Eastbound - P.M.

Mathilda Avenue to Route 880/237 I/C

Typical data for 2007 (5)

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#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	101	1	39	0
Buses	8	0	4	0
Carpools (1)	2177	218	742	42
Vanpools	0	1	0	0
Hybrid/Single Occ. (2)	145	11602	67	4161
Violators	2		0	
TOTAL	2433	11822	852	4203

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	101	1	39	0
Buses	280	0	140	0
Carpools (1)	4704	461	1609	91
Vanpools	0	10	0	0
Hybrid/Single Occ. (2)	145	11602	67	4161
Violators	2		0	_
TOTAL	5232	12074	1855	4252

#### **RATES**

HOV Lane occupancy rate	2.2 persons/veh	2.2 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	0.1 %	0.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 05/23/07 at the Zanker Road I/C

# **Violation History**

Route 880/237 I/C to Mathilda Avenue

#### Westbound

**VIOLATION** 

### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Tue Sep 18, 2007	6:00 - 9:00 AM	2092	0.1%
Wed Apr 26, 2006	6:00 - 9:00 AM	1631	0.3%
Wed Nov 2, 2005	6:00 - 9:00 AM	1666	3.1%
Thu Nov 18, 2004	6:00 - 9:00 AM	1407	0.9%
Thu May 29, 2003	6:00 - 9:00 AM	1644	0.0%
Thu May 2, 2002	6:00 - 9:00 AM	1577	3.7%
Thu May 3, 2001	6:00 - 9:00 AM	1916	5.3%
Wed Nov 15, 2000	6:00 - 9:00 AM	2055	2.7%
Tue Nov 9, 1999	6:30 - 9:00 AM	1917	1.9%
Tue Sep 29, 1998	7:00 - 9:00 AM	1770	3.3%
Tue May 13, 1997	6:30 - 9:00 AM	2015	2.8%
Thu May 30,1996	6:00 - 9:00 AM	3274	0.5%

PERIOD

TOTAL HOVL

#### P.M. PEAK

Tue Jun 12, 2007	3:00 - 6:00 PM	1641	8.2%
Tue Mar 28, 2006	3:00 - 6:00 PM	1008	4.3%
Tue Oct 25, 2005	3:00 - 6:00 PM	908	2.1%
Thu Dec 9, 2004	3:00 - 5:15 PM	493	10.8%
Thu Oct 9, 2003	3:00 - 6:00 PM	698	5.6%
Wed May 15, 2002	3:00 - 6:00 PM	773	2.2%
Wed May 30, 2001	3:00 - 6:00 PM	1102	3.1%
Wed Sep 13, 2000	3:00 - 6:00 PM	1155	2.5%
Wed Mar 3, 1999	3:00 - 7:00 PM	1260	0.6%
Tue Sep 29, 1998	3:00 - 6:00 PM	1658	2.8%
Tue Oct 14, 1997	3:00 - 6:00 PM	1866	0.8%
Wed Jun 12,1996	3:00 - 6:00 PM	1593	0.9%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.

# **Violation History**

Mathilda Avenue to Route 880/237 I/C

#### **Eastbound**

	DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
A.M. PEAK	Thu Nov 29, 2007	6:00 - 9:00 AM	741	0.4%
	Tue May 9, 2006	6:00 - 9:00 AM	710	11.1%
	Year 2005	-	-	-
	Year 2004	-	-	-
	Year 2003	-	-	-
	Thu Oct 31, 2002	7:00 - 9:00 AM	561	12.1%
	Thu Mar 29, 2001	6:00 - 9:00 AM	759	15.0%
	Thu May 25, 2000	6:00 - 9:00 AM	536	5.8%
	Thu Oct 14, 1999	6:00 - 9:00 AM	769	11.4%
	Thu Oct 8, 1998	7:00 - 9:00 AM	750	3.2%
	Wed Oct 29, 1997	6:30 - 9:00 AM	723	0.1%
	Thu Nov 14, 1996	6:30 - 9:00 AM	845	7.5%
P.M. PEAK	Wed May 23, 2007	3:00 - 6:00 PM	2433	0.1%
	Thu May 11, 2006	3:00 - 6:00 PM	1671	4.2%
	Thu Oct 6, 2005	3:00 - 6:00 PM	1746	13.3%
	Wed Dec 1, 2004	3:00 - 5:00 PM	1324	0.8%
	Tue Oct 14, 2003	3:00 - 6:00 PM	1296	0.9%
	Wed May 1, 2002	3:00 - 6:00 PM	1396	1.9%
	Thu May 3, 2001	3:00 - 6:00 PM	1255	2.1%
	Tue Mar 21, 2000	4:00 - 7:00 PM	2181	0.4%
	Thu Nov 18, 1999	3:00 - 6:00 PM	2535	3.0%
	Thu Oct 15, 1998	3:00 - 6:00 PM	2418	5.0%
	Tue Oct 28, 1997	3:00 - 6:00 PM	2835	2.7%
	Thu Oct 17, 1996	3:00 - 6:00 PM	3682	0.3%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

## Southbound - P.M.

Magdalena Avenue to Leland Avenue

Typical data for 2007 (5)

	PEAK PERIOD (4) 3:00 - 6:00 PM			<b>PEAK HOUR</b> 5:00 - 6:00 PM		
VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes	
Motorcycles	44	8		16	1	
Buses	7	11	_	0	2	
Carpools <sup>(1)</sup>	2302	992	_	728	205	
Vanpools	0	4	_	0	4	
Hybrid/Single Occ. (2)	51	15126	_	31	5567	
Violators	0	_		0	_	
TOTAL	2404	16141		775	5779	
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes	
Motorcycles	44	8	_	16	1	
Buses	245	385	_	0	70	
Carpools (1)	4758	2123	_	1498	444	
Vanpools	0	40	_	0	40	
Hybrid/Single Occ. (2)	51	15126	_	31	5567	
Violators	0		_	0		
TOTAL	5098	17682		1545	6122	
RATES			_			
HOV Lane occupancy rate	2.1	persons/veh		2.0	persons/veh	
Mixed Flow occupancy rate	1.1	persons/veh	_	1.1	persons/veh	
Overall occupancy (incl. buses)	1.2	persons/veh	_	1.2	persons/veh	
Violation rate (HOV Lane)	0.0	%	_	0.0	%	

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\frac{\text{no. of violators in HOV lane } x \text{ 100\%}}{x \text{ 100\%}}$

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 04/10/07 at the Wolfe Road I/C

### Northbound - A.M.

Leland Avenue to Magdalena Avenue

Typical data for 2007 (5)

### PEAK PERIOD (4)

#### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	20	2	_	8	2
Buses	10	4	_	6	2
Carpools (1)	1972	206	_	641	115
Vanpools	0	1	_	0	1
Hybrid/Single Occ. (2)	89	14101	_	53	5318
Violators	14		_	1	
TOTAL	2105	14314		709	5438

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	20	2	8	2
Buses	350	140	210	70
Carpools (1)	4003	430	1307	241
Vanpools	0	10	0	10
Hybrid/Single Occ. (2)	89	14101	53	5318
Violators	14	_	1	
TOTAL	4476	14683	1570	5641

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.2 persons/veh
Mixed Flow occupancy rate	1.0 persons/veh	1.0 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.2 persons/veh
Violation rate (HOV Lane)	0.7 %	0.1 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 12/05/07 at the Wolfe Road I/C

## **Violation History**

Magdalena Avenue to Leland Avenue

#### **Southbound**

**VIOLATION** 

#### A.M. PEAK

MONITORED	VOLUME	RATE
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
6:30 - 9:00 AM	372	4.6%
6:00 - 9:00 AM	524	2.7%
6:00 - 9:00 AM	474	9.3%
6:00 - 9:00 AM	608	0.3%
6:00 - 9:00 AM	781	0.1%
7:00 - 9:00 AM	592	0.0%
7:00 - 9:00 AM	1087	1.4%
	- - - - 6:30 - 9:00 AM 6:00 - 9:00 AM 6:00 - 9:00 AM 6:00 - 9:00 AM 7:00 - 9:00 AM	

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Tue Apr 10, 2007	3:00 - 6:00 PM	2404	0.0%
Thu Apr 27, 2006	3:00 - 6:00 PM	1569	3.5%
Tue Dec 13, 2005	3:00 - 6:00 PM	2469	0.0%
Tue Nov 2, 2004	3:00 - 5:30 PM	1817	2.3%
Thu Jun 12, 2003	3:00 - 5:30 PM	1756	1.0%
Thu Sep 19, 2002	3:00 - 6:00 PM	1933	0.6%
Thu Oct 11, 2001	3:00 - 6:00 PM	2221	1.0%
Wed Oct 11, 2000	3:00 - 6:00 PM	2325	5.0%
Wed Apr 21, 1999	3:00 - 6:00 PM	2058	4.9%
Tue Dec 8, 1998	3:00 - 6:00 PM	2236	1.0%
Tue Oct 21, 1997	3:00 - 6:00 PM	2050	2.8%
Tue Jun 11, 1996	3:00 - 6:00 PM	1716	4.3%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## **Violation History**

Leland Avenue to Magdalena Avenue

#### **Northbound**

**VIOLATION** 

**TOTAL HOVL** 

#### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Thu Dec 5, 2007	6:00 - 9:00 AM	2105	0.7%
Thu Dec 14, 2006	6:00 - 9:00 AM	1843	0.1%
Tue Mar 8, 2005	6:00 - 9:00 AM	1602	0.8%
Thu Oct 7, 2004	6:00 - 9:00 AM	2213	2.4%
Thu Jun 5, 2003	6:00 - 9:00 AM	1558	7.4%
Tue May 21, 2002	6:00 - 9:00 AM	1355	5.4%
Tue Nov 6, 2001	6:00 - 9:00 AM	1253	1.6%
Wed Mar 29, 2000	6:00 - 9:00 AM	2086	1.7%
Thu Nov 4, 1999	6:30 - 9:00 AM	1884	0.3%
Wed Dec 9, 1998	6:00 - 9:00 AM	2235	3.7%
Wed Apr 23, 1997	6:00 - 9:00 AM	1851	0.10%
Tue Jun 11, 1996	6:00 - 9:00 AM	1762	1.40%

**PERIOD** 

#### P.M. PEAK

Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Tue May 28, 2002	3:00 - 6:00 PM	1081	1.5%
Wed Apr 4, 2001	3:00 - 6:00 PM	1160	0.9%
Thu Apr 13, 2000	3:00 - 6:00 PM	1106	5.4%
Tue Apr 20, 1999	3:00 - 6:00 PM	938	0.2%
Tue Sep 15, 1998	3:00 - 6:00 PM	955	5.3%
Wed, Apr 23, 1997	3:00 - 6:00 PM	1975	0.5%
Thu Dec 12, 1996	3:00 - 5:30 PM	1205	4.2%

- **NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

# **SAN FRANCISCO-80**

**RAMP HOV LANE** 

Sterling Street on-ramp to SFOBB

## Eastbound-P.M.

Typical data for 2007

### PEAK PERIOD (4)

### **PEAK HOUR**

3:30 - 7:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	SOV Lane		HOV Lane	SOV Lane
Motorcycles	93	_		31	_
Buses	29	_		17	_
Carpool <sup>(1)</sup>	1783	_		574	_
2 - seaters (2)	561	_		181	_
Hybrid	293	_	_	66	
Vanpools	79	_	_	42	
Trucks	42	_	_	9	
Violators	343		_	104	
TOTAL	3223	N/A		1024	N/A
PERSONS	HOV Lane	SOV Lane	_	HOV Lane	SOV Lane
Motorcycles	93	_	_	31	
Buses	1015		_	595	
Carpool (1)	5527		_	1779	
2 - seaters (2)	1122		_	362	
Hybrid	293		_	66	
Vanpools	790		_	420	
Trucks	42		_	9	
Violators	461		_	151	
TOTAL	9343	N/A		3413	N/A
RATES			_		
HOV Lane occupancy rate	2.9	persons/veh	_	3.3	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	10.6	%		10.2	%

**NOTES:** (1) 3 or more persons per vehicle.

(2) 2 - seater vehicles with 2 persons.

(3) Violation rate = no. of violators in HOV lane x 100%

Total no. of vehicles in HOV lane

(4) HOV lane in operation from 3:30 to 7:00 PM.

(5) Observations conducted 9/20/07 at the Sterling Street on-ramp

### **SAN FRANCISCO-80 RAMP HOV LANE**

# **Violation History**

**Eastbound** 

Sterling Street On-Ramp to SFOBB

#### P.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu Sep 20, 2007	3:30 - 7:00 PM	3223	10.6%
Tue Sep 12, 2006	3:30 - 7:00 PM	3411	23.0%
Tue Mar 8, 2005	3:30 - 7:00 PM	3391	24.4%
Tue Oct 12, 2004	3:30 - 7:00 PM	3161	20.2%
Wed Apr 30, 2003	3:30 - 7:00 PM	2185	22.6%
Tue Sep 17, 2002	3:30 - 7:00 PM	2713	15.1%
Wed Oct 10, 2001	3:30 - 7:00 PM	3133	10.4%
Thu Oct 19, 2000	3:30 - 7:00 PM	3327	6.5%
Thu Oct 14, 1999	3:30 - 7:00 PM	3566	27.5%
Thu Dec 3, 1998	3:30 - 7:00 PM	3276	29.0%
Wed Jun 11, 1997	3:30 - 7:00 PM	2810	12.4%
Tue Apr 23, 1996	3:30 - 7:00 PM	1891	22.2%
Wed Mar 29, 1995	3:30 - 7:00 PM	2692	52.6%
Tue May 17, 1994	4:00 - 6:00 PM	787	28.3%
Wed Oct 13, 1993	4:00 - 6:00 PM	1023	34.6%
Thu Jun 4, 1992	4:00 - 6:00 PM	1051	35.0%
Tue Dec 3, 1991	4:00 - 6:00 PM	1427	28.0%
Thu Nov 15, 1990	4:00 - 6:00 PM	701	58.3%
Tue Apr 18, 1989	4:30 - 6:00 PM	821	17.4%
Tue Apr 26, 1988	4:00 - 6:00 PM	1599	69.2%
Tue Oct 20, 1987	4:00 - 6:00 PM	1103	53.3%
Tue Apr 21, 1987	4:00 - 6:00 PM	960	40.1%
Tue Oct 21, 1986	4:00 - 6:00 PM	1576	50.7%

**NOTES:** Evening period of operation from 3:30 to 7:00 P.M.

## Southbound - A.M.

Whipple Avenue to SM/SCL County

Typical data for 2007 (5)

P	F	K	PF	RI	0	n	(4)
		•••			•	_	

#### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lar	Mixed Flow ne Lanes
Motorcycles	31	11	12	3
Buses	40	48	22	4
Carpools (1)	1634	535	497	258
Vanpools	11	15	1	4
Single Occ. (2)	245	15574	153	5623
Violators	11		9	
TOTAL	1972	16183	694	5892

PERSONS		HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
	Motorcycles	31	11	_	12	3
	Buses	1400	1680	_	770	140
	Carpools (1)	3331	1162	_	1035	556
	Vanpools	110	150	_	10	40
	Single Occ. (2)	245	15574	_	153	5623
	Violators	11		_	9	
	TOTAL	5128	18577		1989	6362

#### **RATES**

HOV Lane occupancy rate	2.6 persons/veh	2.9 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (HOV Lane)	0.6 %	1.3 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 12/13/07 at the Woodside Road I/C

## Southbound - P.M.

Whipple Avenue to SM/SCL County Line

Typical data for 2007 (5)

### PEAK PERIOD (4)

#### **PEAK HOUR**

3:00 - 6:00 PM

5:00 - 6:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	66	15	26	7
Buses	21	27	9	2
Carpools (1)	1702	1084	657	339
Vanpools	24	2	11	0
Hybrid/Single Occ. (2)	178	13816	94	4790
Violators	79		10	_
TOTAL	2070	14944	807	5138

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	66	15	26	7
Buses	735	945	315	70
Carpools <sup>(1)</sup>	3648	2379	1417	733
Vanpools	240	20	110	0
Hybrid/Single Occ. (2)	178	13816	94	4790
Violators	79		10	_
TOTAL	4946	17175	1972	5600

#### **RATES**

HOV Lane occupancy rate	2.4 persons/veh	2.4 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (3) (HOV Lane)	3.8 %	1.2 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 05/24/07 at the Woodside Road I/C

### Northbound - A.M.

SM/SCL County Line to Whipple Avenue

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

6:00 - 9:00 AM

8:00 - 9:00 AM

VEHICLES	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	50	10	-	20	3
Buses	10	23	_	5	10
Carpools (1)	2256	345	_	618	165
Vanpools	0	2	_	0	2
Hybrid/Single Occ. (2)	141	10955	_	92	4189
Violators	21			11	
TOTAL	2478	11335		746	4369

PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	50	10	20	3
Buses	350	805	175	350
Carpools <sup>(1)</sup>	4541	740	1253	344
Vanpools	0	20	0	20
Hybrid/Single Occ. (2)	141	10955	92	4189
Violators	21		11	
TOTAL	5103	12530	1551	4906

#### **RATES**

HOV Lane occupancy rate	2.1 persons/veh	2.1 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (HOV Lane)	0.8 %	1.5 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) HOV lane in operation from 5:00 to 9:00 A.M.
- (5) Observations conducted 03/13/07 at the Woodside Road I/C

## Northbound - P.M.

SM/SCL County Line to Whipple Avenue

Typical data for 2007 (5)

### PEAK PERIOD (4)

### **PEAK HOUR**

3:00 - 6:00 PM

4:00 - 5:00 PM

VEHICLES	HOV Lane	Mixed Flow Lanes	H	HOV Lane	Mixed Flow Lanes
Motorcycles	57	14		22	4
Buses	31	21		14	7
Carpools (1)	2009	439		664	152
Vanpools	28	3		14	1
Hybrid/Single Occ. (2)	199	11996		64	4183
Violators	184			50	
TOTAL	2508	12473		828	4347

PERSONS	HOV Lane	Mixed Flow Lanes	НО	V Lane	Mixed Flow Lanes
Motorcycles	57	14		22	4
Buses	1085	735		490	245
Carpools (1)	4308	931		1435	316
Vanpools	280	30		140	10
Hybrid/Single Occ. (2)	199	11996		64	4183
Violators	184			50	
TOTAL	6113	13706	2	2201	4758

#### **RATES**

HOV Lane occupancy rate	2.4 persons/veh	2.7 persons/veh
Mixed Flow occupancy rate	1.1 persons/veh	1.1 persons/veh
Overall occupancy (incl. buses)	1.3 persons/veh	1.3 persons/veh
Violation rate (HOV Lane)	7.3 %	6.0 %

**NOTES:** (1) Two or more occupants per vehicle.

- (2) Mixed flow lanes only.
- (3) Violation rate = no. of violators in HOV lane x 100%

- (4) HOV lane in operation from 3:00 to 7:00 P.M.
- (5) Observations conducted 11/29/07 at the Woodside Road I/C

## **Violation History**

Whipple Avenue to the SM/SCL County Line

#### Southbound

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu Dec 13, 2007	6:00 - 9:00 AM	1972	0.6%
Wed May 31, 2006	6:00 - 9:00 AM	1238	0.8%
Thu Mar 10, 2005	6:00 - 9:00 AM	1177	1.4%
Wed Dec 15, 2004	7:00 - 9:00 AM	1355	0.1%
Wed Apr 9, 2003	6:00 - 9:00 AM	1701	0.6%
Tue Mar 26, 2002	6:00 - 9:00 AM	1549	3.5%
Thu Mar 22, 2001	6:00 - 9:00 AM	1746	2.2%
Tue Apr 25, 2000	6:00 - 9:00 AM	1849	7.0%
Thu Dec 2, 1999	6:45 - 9:00 AM	1915	5.2%
Tue Mar 10, 1998	6:00 - 9:00 AM	2711	0.8%
Tue Sept 23, 1997	7:00 - 9:00 AM	1761	0.7%
Wed Mar 27, 1996	6:00 - 9:00 AM	1681	4.6%

#### P.M. PEAK

Thu May 24, 2007	3:00 - 6:00 PM	2070	3.8%
Tue Jun 13, 2006	3:00 - 6:00 PM	1754	0.5%
Wed Sep 28, 2005	3:00 - 6:00 PM	1568	1.5%
Tue Oct 26, 2004	3:00 - 6:00 PM	1296	1.5%
Wed May 14, 2003	3:00 - 6:00 PM	1488	2.5%
Wed Oct 2, 2002	3:00 - 6:00 PM	1895	3.2%
Thu Nov 8, 2001	3:00 - 5:30 PM	1685	7.0%
Thu Oct 12, 2000	3:00 - 6:00 PM	2245	3.3%
Wed Dec 8, 1999	3:00 - 5:15 PM	1683	0.5%
Thu Dec 10, 1998	3:00 - 6:00 PM	2537	1.6%
Wed Nov 5, 1997	3:00 - 6:00 PM	2514	0.6%
Wed Mar 27,1996	3:00 - 6:00 PM	2836	1.9%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

## **Violation History**

SM/SCL County Line to Whipple Avenue

#### **Northbound**

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Tue Mar 13, 2007	6:00 - 9:00 AM	2478	0.8%
Thu Oct 26, 2006	6:00 - 9:00 AM	1573	0.2%
Wed Apr 6, 2005	6:00 - 9:00 AM	1409	0.5%
Wed Dec 1, 2004	6:00 - 9:00 AM	1337	0.7%
Thu Oct 9, 2003	7:00 - 9:00 AM	1031	1.5%
Tue Apr 9, 2002	6:45 - 9:00 AM	865	5.7%
Wed Oct 31, 2001	6:00 - 9:00 AM	1662	2.1%
Thu Oct 12, 2000	6:00 - 9:00 AM	2964	4.7%
Thu Apr 29, 1999	6:00 - 9:00 AM	2088	0.5%
Tue Oct 27, 1998	6:00 - 9:00 AM	1873	2.1%
Thu Sept 25, 1997	7:00 - 9:00 AM	1348	0.1%
Wed Jun 5, 1996	6:00 - 9:00 AM	1799	3.3%

#### P.M. PEAK

Thu Nov 29, 2007	3:00 - 6:00 PM	2508	7.3%
Thu Jun 1, 2006	3:00 - 6:00 PM	2343	0.0%
Tue Oct 4, 2005	3:00 - 6:00 PM	2025	0.4%
Thu Oct 28, 2004	3:00 - 6:00 PM	1929	0.1%
Tue Apr 8, 2003	3:00 - 6:00 PM	2327	2.0%
Wed Jun 5, 2002	3:00 - 6:00 PM	1969	3.4%
Wed Nov 14, 2001	3:00 - 5:30 PM	1675	0.2%
Tue Sep 12, 2000	3:00 - 6:00 PM	2329	14.3%
Tue Oct 26, 1999	3:00 - 6:00 PM	2987	8.5%
Wed Dec 9, 1998	3:00 - 6:00 PM	2670	6.6%
Tue Apr 29, 1997	3:00 - 6:00 PM	2616	0.9%
Thu Sep 26, 1996	3:00 - 6:00 PM	2619	5.8%

**NOTES:** (a) Morning period of operation from 5:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 7:00 PM.

# **SOLANO-80**

## Eastbound - P.M.

Carquinez Bridge Toll Plaza

Typical data for 2007

(C)

	PEAK PERIOD <sup>(5)</sup> 3:00 to 7:00 P.M.		<b>PEAK</b> 5:00 to 6		
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	268	_		63	
Buses (4)	17	_		6	_
Carpools (1)	1903	_		548	_
2 - seaters (2)	690	_		183	_
Hybrid	115	_	_	33	_
Vanpools	112	_	_	37	_
Violators (HOV only)	347	_	_	89	_
TOTAL	3452	15161	(7)	959	3830
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	268	_		63	_
Buses (4)	595	_	_	210	_
Carpools (1)	5899	_		1699	_
2 - seaters (2)	1380	_		366	_
Hybrid	115	_	_	33	_
Vanpools	1120	_		370	_
Violators (HOV only)	579	_		147	_
TOTAL	9956	16677	(7)	2888	4213
RATES					
HOV Lane occupancy rate	2.9	persons/veh	_	3.0	persons/veh
Mixed Flow <sup>(7)</sup> Occupancy Rate	1.1	persons/veh	_	1.1	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	10.1 %		9.3	%	

**NOTES:** (1) 3 or more persons per vehicle.

- (2) 2 seater vehicles with 2 persons.
- (3) Violation rate =  $\underline{no. of violators in HOV lane \ x \ 100\%}$

- (4) Assumed PM bus occupancy = 35 persons/vehicle.
- (5) HOV lane in operation from 3:00 to 7:00 P.M.
- (6) Observations conducted 9/18/07 at the Carquinez Bridge Toll Plaza.
- (7) Data from Toll Plaza vehicle Registration Report.

# **SOLANO-80**

# **Violation History**

Carquinez Bridge Toll Plaza

#### **Eastbound**

**VIOLATION** 

#### A.M. PEAK

DATE	MONITORED	VOLUME	RATE
Year 2007	-	-	-
Year 2006	-	-	-
Year 2005	-	-	-
Year 2004	-	-	-
Year 2003	-	-	-
Thu Nov 14, 2002	5:00 - 10:00 AM	706	10.1%
Thu May 31, 2001	5:00 - 10:00 AM	804	24.5%
Thu Nov 16, 2000	5:00 - 10:00 AM	773	34.4%
Wed Mar 10, 1999	6:00 - 10:00 AM	664	26.2%
Wed Sep 16, 1998	6:00 - 10:00 AM	559	27.2%

**PERIOD** 

**TOTAL HOVL** 

#### P.M. PEAK

Tue Sep 18, 2007	3:00 - 7:00 PM	3452	10.1%
Thu Sep 14, 2006	3:00 - 7:00 PM	3285	11.0%
Wed Sep 14, 2005	3:00 - 7:00 PM	3523	6.0%
Wed Oct 13, 2004	3:00 - 7:00 PM	3342	9.4%
Thu May 15, 2003	3:00 - 7:00 PM	3360	8.8%
Thu Sep 26, 2002	3:00 - 7:00 PM	3429	9.5%
Thu Mar 29, 2001	3:00 - 7:00 PM	3493	1.2%
Tue Oct 17, 2000	3:00 - 7:00 PM	3373	9.5%
Wed Sep 29, 1999	3:00 - 7:00 PM	2945	12.9%
Wed Sep 16, 1998	3:00 - 7:00 PM	2203	12.4%

- **NOTES:** (a) Morning period of operation from 5:00 to 10:00 AM
  - (b) Evening period of operation from 3:00 to 7:00 PM.
  - (c) Data was not collected in 2007 for off-peak direction

## Southbound - A.M.

Route 12 to Wilfred Avenue

		PERIOD (4) 9:00 AM			HOUR B:00 AM
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	45	8	_	18	6
Buses	4	5	_	0	2
Carpools (1)	667	230		351	96
Vanpools	1	12	_	1	11
Hybrid/Single Occ. (2)	30	6851	_	15	3483
Violators	34	_		21	_
TOTAL	781	7106	-	406	3598
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	45	8		18	6
Buses	140	175		0	70
Carpools (1)	1381	507		727	212
Vanpools	10	120		10	110
Hybrid/Single Occ. (2)	30	6851		15	3483
Violators	34	_		21	_
TOTAL	1640	7661		791	3881
RATES					
HOV Lane occupancy rate	2.1	persons/veh	-	1.9	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh	_	1.1	persons/veh
Overall occupancy (incl. buses)	1.2	persons/veh	_	1.2	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	4.4	%	_	5.2	%
NOTES: (1) (2) (3) (4) (5)	Hybrid HOV Lan Violation rate =  HOV lane in open	upants per vehicle.  ne only/Single Occu  no. of violators in  Total no. of vehice  ration from 7:00 to	upancy HOV l les in H	lane x 100% IOV lane A.M.	

# Southbound - P.M.

Route 12 to Wilfred Avenue

	PEAK PERIOD (4) 3:00 - 6:30 PM		<b>PEAK</b> 4:00 - 5		
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	84	12	_	35	5
Buses	17	36		4	7
Carpools (1)	1989	1157	_	616	308
Vanpools	8	8		1	2
Hybrid/Single Occ. (2)	64	10871		18	3407
Violators	61	_		4	_
TOTAL	2223	12084		678	3729
PERSONS	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	84	12		35	5
Buses	595	1260		140	245
Carpools (1)	4230	2485		1311	651
Vanpools	80	80		10	20
Hybrid/Single Occ. (2)	64	10871	_	18	3407
Violators	61			4	
TOTAL	5114	14708		1518	4328
RATES					
HOV Lane occupancy rate	2.3	persons/veh		2.2	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh		1.2	persons/veh
Overall occupancy (incl. buses)	1.4	persons/veh	_	1.3	persons/veh
Violation rate (3) (HOV Lane)	2.7	%	_	0.6	%
(2) (3) (4)	Hybrid HOV Lan Violation rate = HOV lane in open	upants per vehicle. e only/Single Occu no. of violators in Total no. of vehicl ration from 3:00 to	ipancy i HOV ld les in H 6:30 P	ov lane	

## Northbound - A.M.

Wilfred Avenue to Route 12

	<b>PEAK PERIOD</b> (4) 7:00 - 9:00 AM			HOUR 8:00 AM
VEHICLES	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	19	5	8	2
Buses	9	15	3	13
Carpools (1)	815	206	326	150
Vanpools	3	13	2	10
Hybrid/Single Occ. (2)	40	6332	17	3227
Violators	32	_	18	_
TOTAL	918	6571	374	3402
PERSONS	HOV Lane	Mixed Flow Lanes	HOV Lane	Mixed Flow Lanes
Motorcycles	19	5	8	2
Buses	315	525	105	455
Carpools (1)	1714	433	694	315
Vanpools	30	130	20	100
Hybrid/Single Occ. (2)	40	6332	17	3227
Violators	32	_	18	
TOTAL	2150	7425	862	4099
RATES				
HOV Lane occupancy rate	2.3	persons/veh	2.3	persons/veh
Mixed Flow occupancy rate	1.1	persons/veh	1.2	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	1.3	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	3.5	%	4.8	%
NOTES: (1) (2) (3) (4) (5)	Hybrid HOV Lan Violation rate =  HOV lane in open	no. of violators in Total no. of vehicl ration from 7:00 to		

## Northbound - P.M.

Wilfred Avenue to Route 12

	PEAK PERIOD (4) 3:00 - 6:30 PM			EAK HOUR 1:00 - 5:00 PM	
VEHICLES	HOV Lane	Mixed Flow Lanes		HOV Lane	Mixed Flow Lanes
Motorcycles	34	9	•	11	4
Buses	14	28	_	4	7
Carpools (1)	1835	877	_	518	236
Vanpools	13	4		5	3
Hybrid/Single Occ. (2)	58	11346		13	3499
Violators	28	_	_	1	_
TOTAL	1982	12264	_	552	3749
PERSONS	HOV Lane	Mixed Flow Lanes	_	HOV Lane	Mixed Flow Lanes
Motorcycles	34	9		11	4
Buses	490	980		140	245
Carpools (1)	3703	1834		1045	498
Vanpools	130	40	_	50	30
Hybrid/Single Occ. (2)	58	11346	_	13	3499
Violators	28		_	1	
TOTAL	4443	14209		1260	4276
RATES					
HOV Lane occupancy rate	2.2	persons/veh	•	2.3	persons/veh
Mixed Flow occupancy rate	1.2	persons/veh	_	1.1	persons/veh
Overall occupancy (incl. buses)	1.3	persons/veh	_	1.3	persons/veh
Violation rate <sup>(3)</sup> (HOV Lane)	1.4	%	-	0.2	%
(2) (3) (4)	Hybrid HOV Land Violation rate = HOV lane in open	upants per vehicle. e only/Single Occup no. of violators in 1 Total no. of vehicle cation from 3:00 to ducted 03/27/07 at	HOV . es in 1 6:30 .	lane x 100% HOV lane P.M.	·

Route 12 to Wilfred Avenue

# **Violation History**

#### **Southbound**

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Thu Mar 22, 2007	7:00 - 9:00 AM	781	4.4%
Wed Oct 18, 2006	7:00 - 9:00 AM	705	4.7%
Thu Mar 10, 2005	7:00 - 9:00 AM	1023	3.8%
Thu Oct 7, 2004	7:00 - 9:00 AM	772	2.2%
Thu Apr 10, 2003	6:30 - 9:30 AM	997	4.8%
Tue Dec 10, 2002	6:30 - 9:30 AM	951	5.8%

### P.M. PEAK

3:00 - 6:30 PM	2223	2.7%
3:00 - 6:30 PM	2277	3.6%
3:00 - 6:30 PM	1967	3.9%
3:00 - 6:30 PM	2809	1.2%
3:00 - 7:00 PM	2224	2.7%
3:00 - 7:00 PM	1645	2.9%
	3:00 - 6:30 PM 3:00 - 6:30 PM 3:00 - 6:30 PM 3:00 - 7:00 PM	3:00 - 6:30 PM 2277 3:00 - 6:30 PM 1967 3:00 - 6:30 PM 2809 3:00 - 7:00 PM 2224

- **NOTES:** (a) Morning period of operation from 7:00 to 9:00 AM.
  - (b) Evening period of operation from 3:00 to 6:30 PM.

# **Violation History**

Wilfred Avenue to Route 12

#### **Northbound**

#### A.M. PEAK

DATE	PERIOD MONITORED	TOTAL HOVL VOLUME	VIOLATION RATE
Wed Mar 28, 2007	7:00 - 9:00 AM	918	3.5%
Wed Oct 25, 2006	7:00 - 9:00 AM	807	3.5%
Tue Mar 15, 2005	7:00 - 9:00 AM	836	4.9%
Thu Oct 14, 2004	7:00 - 9:00 AM	666	4.4%
Wed Apr 9, 2003	6:30 - 9:30 AM	839	6.0%
Thu Dec 5, 2002	6:30 - 9:30 AM	696	6.6%

#### P.M. PEAK

3:00 - 6:30 PM	1982	1.4%
3:00 - 6:30 PM	1907	3.7%
3:00 - 6:30 PM	2263	2.0%
3:00 - 6:30 PM	1945	2.2%
3:00 - 7:00 PM	2172	3.2%
3:00 - 7:00 PM	2145	1.9%
	3:00 - 6:30 PM 3:00 - 6:30 PM 3:00 - 6:30 PM 3:00 - 7:00 PM	3:00 - 6:30 PM 1907 3:00 - 6:30 PM 2263 3:00 - 6:30 PM 1945 3:00 - 7:00 PM 2172

**NOTES:** (a) Morning period of operation from 7:00 to 9:00 AM.

(b) Evening period of operation from 3:00 to 6:30 PM.

**VOLUME/PERSON DATA** 

## Westbound - A.M.

# Richmond-San Rafael Bridge Toll Plaza

Typical data for 2007 (3)

**CONTRA COSTA - 580** 

6:00 - 10:00	AM	<b>PEAK HOUR</b> 7:00 - 8:00 AM	
VEHICLES			
Motorcycles 58		31	
Buses 12		5	
Vanpools7		2	
Carpools (1) 689	_	376	
Total HOVs 766		414	
1 Occupancy449		147	
2 Occupancy 137	<u> </u>	50	
<b>TOTAL</b> 1352		611	
PERSONS			
Motorcycles 58	<del></del>	31	
Buses420		175	
Vanpools70		20	
Carpools <sup>(1)</sup> 1862	_	1046	
Total HOVs 2410		1272	
1 Occupancy449		147	
2 Occupancy 274		100	
<b>TOTAL</b> 3133		1519	
RATES			
HOV Occupancy Rate	s.1 persons/veh	3.1 persons/veh	
Mixed Flow Occupancy Rate	.2 persons/veh	1.3 persons/veh	
Overall Occupancy (incl. buses)	2.3 persons/veh	2.5 persons/veh	

**NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

 $(2)\ \ HOV\ operation\ hours\ from\ 5:00\ to\ 10:00\ AM\ and\ 3:00\ to\ 6:00\ PM.$ 

(3) Observations conducted 10/3/07 at Toll Plaza.

## Westbound - P.M.

# Richmond-San Rafael Bridge Toll Plaza

Typical data for 2007

**CONTRA COSTA - 580** 

PI	3:00 - 6:00 PM	<b>D</b> (2)	P	<b>PEAK HOU</b> 4:00 - 5:00 PM	R
VEHICLES					
Motorcycles	55			17	
Buses	4			4	
Vanpools	13			3	
Carpools (1)	326			119	
Total HOVs	398			143	
1 Occupancy	275			93	
2 Occupancy	98			36	
TOTAL	771			272	
PERSONS					
Motorcycles	55			17	
Buses	140			140	
Vanpools	130			30	
Carpools (1)	923			345	
Total HOVs	1248			532	
1 Occupancy	275			93	
2 Occupancy	196			72	
TOTAL	1719			697	
RATES					
HOV Occupancy Rate	3.1 p	persons/veh		3.7	persons/veh
Mixed Flow Occupancy Rate	1.3 p	persons/veh		1.3	persons/veh
Overall Occupancy (incl. buses)	2.2 p	persons/veh		2.6	persons/veh

**NOTES:** (1) 3 or more persons per vehicle & 2 - seater vehicles with 2 persons.

 $(2)\ \ HOV\ operation\ hours\ from\ 5:00\ to\ 10:00\ AM\ and\ 3:00\ to\ 6:00\ PM.$ 

(3) Observations conducted 10/2/07 at Toll Plaza.

## Northbound A.M.

**Antioch Bridge Toll Plaza** 

**CONTRA COSTA -160** 

	PEAK PERIOD (2) 6:00 to 9:00 A.M.	PEAK HOUR 6:00 to 7:00 A.M.
VEHICLES		
Motorcycles	9	5
Buses	0	0
Vanpools	0	0
Carpools <sup>(1)</sup>	37	7
Total HOV	46	12
1 Occupancy	841	314
2 Occupancy	167	38
TOTAL	1054	364
PERSONS		
Motorcycles	9	5
Buses	0	0
Vanpools	0	0
Carpools <sup>(1)</sup>	115	
Total HOV	124	27
1 Occupancy	841	314
2 Occupancy	334	76
TOTAL	1299	417
RATES		
HOV Ocupancy Rate	2.7 persons/veh	2.2 persons/veh
Overall occupancy (incl. buses)	1.2 persons/veh	1.1 persons/veh

- **NOTES:** (1) 3 or more occupants per vehicle & 2-seater vehicles w/2 occupants.
  - (2) HOV operation hours 5:00 to 10:00 AM.
  - (3) Observations conducted 04/18/07 at Toll Plaza

## Northbound P.M.

**Antioch Bridge Toll Plaza** 

**CONTRA COSTA -160** 

	PEAK PERIOD (2) 3:00 to 6:00 P.M.	<b>PEAK HOUR</b> 4:00 to 5:00 P.M.
VEHICLES		
Motorcycles Buses Vanpools Carpools (1) Total HOV 1 Occupancy 2 Occupancy TOTAL	18 0 1 67 <b>86</b> 1206 268	8 0 1 30 39 450 99
PERSONS		
Motorcycles Buses Vanpools Carpools (1) Total HOV 1 Occupancy 2 Occupancy TOTAL	18 0 10 208 <b>236</b> 1206 536 1978	8 0 10 93 111 450 198 759
RATES		
HOV Ocupancy Rate Overall occupancy	2.7 persons/veh	2.8 persons/veh
(incl. buses)	1.3 persons/veh	1.3 persons/veh

- **NOTES:** (1) 3 or more occupants per vehicle & 2-seater vehicles w/2 occupants.
  - (2) HOV operation hours 3:00 to 7:00 PM.
  - (3) Observations conducted 4/24/07 at Toll Plaza